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Ontario Justice Provincial Park Advisory Committee
Public Hearings by and briefs to the Justice
Provincial Park Advisory Committee
& Committees

Government Publications
QUETICO PARK

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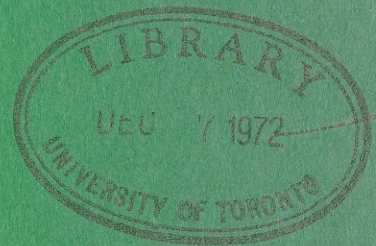
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Ontario, Quetico Provincial Park Advisory Committee

PUBLIC HEARINGS BY AND BRIEFS TO
THE QUETICO PROVINCIAL PARK
ADVISORY COMMITTEE

Committee



VOLUME FOUR

(See Volume One for index to all four volumes)

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* Appendix to #73 - Domtar Pulp & Paper

M.L.Heinselman
1783 Lindig Street
St. Paul, Minnesota 55113
February 27, 1971

Mr. R. T. Thomson, Secretary
Quetico Advisory Committee
Ontario Dept. of Lands and Forests
Fort Frances, Ontario

A brief to the Quetico Advisory Committee, from
Miron L. Heinselman, Forest Ecologist, concerning
some possible ecological alternatives in Quetico
Provincial Park.

First, let me identify myself. I am an ecologist engaged in studies of ecosystem maintenance problems in the Boundary Waters Canoe Area for the North Central Forest Experiment Station, St. Paul, Minnesota. This brief is a strictly personal effort and has no official status. I have just learned that your committee would accept statements from interested American neighbors, and I am anxious to aid your important mission in any way possible.

My research includes studies of the silviculture and regeneration of aspen, northern hardwoods, the pines, and black spruce, including work on prescribed fire, from 1948 to 1965, work on the forest sites and ecology of peatlands from 1955 to 1965, and since 1966 studies of the natural role of fire and of the forest ecology in the virgin forests of the BWCA.

I am well acquainted with Quetico, having travelled its lakes, streams, and portages with my boyhood chums, and later with my wife and children, over the past 32 years. I have made no actual studies in Quetico, but of course the BWCA and Quetico are nearly identical ecologically. Consideration of forest vegetation management in Quetico is an important part of your mission, and it is to this problem that I address this brief.

Any discussion of vegetation policies must first consider the objectives which those policies serve. For parks and wilderness-type areas the primary concerns are commonly recreation and aesthetics, habitat for native wildlife, and the scientific and educational values of the plant and animal ecosystems. Quetico and the BWCA comprise a truly unique lakeland wilderness, and all of these values are high. Much has already been written about this and I will not belabor the point. But an

adequate vegetation program must certainly assure perpetuation of all of these values. And in a wilderness region such as the Quetico-Superior the focus is heavily on natural landscapes, and natural ecosystem values.

In Quetico, as in the BWCA, there is still a very significant remnant of the natural plant cover and of the native wildlife. Moose, beaver, deer, snowshoe hares, porcupines, grouse, and many other plant-eating animals and birds are common, as are their natural predators, the timber wolf, fox, fisher, mink, weasel, bobcat, lynx, eagle, and others. To be sure, the caribou and passenger pigeon are gone, but the natural fauna is far more intact here than in southeastern Canada or in the U.S. Substantial areas of both the BWCA and Quetico were logged for big white and red pine between about 1895 and 1945, but no permanent roads or railroads were built, and the landscape was little scarred for the most part. Many areas were not cut, either because the stands were too scattered, the trees too young, or of the wrong species.

In the BWCA I began my ecological studies by mapping the remaining natural forests. We found that at least 40% of the area (400,000 acres) had never been cut for timber. Many of these natural or "virgin" forests were relatively young, dating from forest fires in the last 50 to 150 years. But lightning fire is a natural environmental factor in this ecosystem, and even-aged post-fire forests of jack pine, aspen, birch, spruce, and red and white pine have always been common. A similar situation certainly exists in Quetico.

If such areas of remaining natural forests are to be maintained, the disturbed vegetation restored, and the native wildlife encouraged, it is vital that as much of the Quetico-Superior region as possible be managed as an ecologically-related whole. Quetico and the BWCA together certainly make a contiguous area large enough so that both nations have a unique opportunity to maintain and restore a viable natural ecosystem. Fragmentation of the area on either side of the border will reduce the chances of success for both nations. All of the lands in both areas, including those still supporting their natural plant cover, and the intermingled cut-over lands, should be committed to such a program.

There are three general forest vegetation policy alternatives for areas such as the BWCA or Quetico:

(1) FULL ECOSYSTEM MAINTENANCE AND RESTORATION:

This management option would provide for all natural environmental factors, deliberately offset the unnatural impacts of man; and then allow the vegetation patterns and animal populations to follow natural successions and cycles. It would provide for the restoration of disturbed plant communities, the reintroduction of missing animals (such as the caribou), and the safe reintroduction of fire as a natural factor (by prescribed burning or modification of fire management practices). All mechanical or chemical vegetation or soil manipulation, tree planting, seeding, etc. would be excluded, except in the restoration of formerly disturbed areas. Native insects and plant diseases would not be controlled directly, and forest blowdowns would not be "cleaned up". Such things are assumed to be natural, and the ecosystem will adjust. (This option is not yet being fully practiced anywhere, but our National Park Service is moving rapidly in this direction, and the BWCA studies that I am conducting background this option also.)

(2) "PROTECTION" FROM FIRE AND DIRECT HUMAN IMPACTS ONLY:

This option would exclude logging, grazing, mining, road-building, and similar direct human impacts, and attempt to exclude all fires. It would accept the gradual successional changes caused by fire exclusion, and not attempt to "restore" formerly disturbed areas. Direct control of forest insects and diseases and clean-up of blowdowns need not be done. (This option is really the present practice in many U.S. and Canadian National Parks and Wilderness Areas, and in the Interior Zone of the BWCA. In the past, insect and disease control, and even predator control, have often been practiced. These practices are now being abandoned as we learn to understand the role of such factors in the ecosystem.)

(3) MANAGEMENT BY SILVICULTURAL METHODS (commercial or non-commercial):

This option regulates forest composition, age structure, and successions by mechanical or chemical tree removal, with soil preparation by mechanical means or prescribed fire, with seeding or planting of the logged areas, and where necessary with hand, mechanical, or chemical weeding of plantations. A road system is necessary if the practice is to

be permanent, and the costs within reason. If done without removal of saleable products, and on much lengthened rotations, it is sometimes called Therapeutic Logging or Therapeutic Management. Direct control of insects and disease with pesticides, and clean-up of blowdowns are often attempted. (This option is advocated for Parks and Wilderness by many timber industry spokesmen, and by some foresters. Depending on the degree of modification of practices to accommodate scenic concerns and recreational uses it may or may not differ much from standard timber-production forestry. In a lakeland such as Quetico or the BWCA timber cutting must eventually be carried to the lakeshore, or the argument that the system is ecologically and aesthetically acceptable is never faced, and important segments of the ecosystem are really managed under option 2. In the Portal Zone of the BWCA this option is still being practiced in several areas, with little modification from standard timber management practices.)

You may perhaps have noted that there is a gradation in acceptance of natural ecosystems from alternatives 1 to 3. The first involves almost complete acceptance, the third complete rejection. In the real world we still have not gotten our heads clear on these choices in most large Wilderness Areas and Parks. In most, actual practice is a combination of all three. But the choice is there!

If we hope to maintain any nature reserves in a truly natural state, we must move rapidly toward the first alternative--FULL ECOSYSTEM MAINTENANCE AND RESTORATION. This alternative is workable, and its choice is crucial. I am fully aware of the lack of management experience with such programs. Necessary research is now underway in the BWCA, in the Selway-Bitterroot Wilderness (Idaho), and in several U.S. National Parks. I believe some very relevant research is also underway in several Canadian parks. But if Ontario moves in this direction for Quetico, it will be a pioneering step that could lead the way to enlightened park policies for many areas in both the U.S. and Canada.

I know there will be questions in making the transition. The problem of fire policies will be difficult. One must not move too quickly here because some of the public may not understand, and some of the necessary technical expertise is still not available. But foresters and ecologists point out that fire exclusion is forcing successional changes from "pioneer" forests of pine, aspen, and birch to "climax" forests of fir,

spruce and cedar. These successional changes are also causing changes in wildlife habitat that may result in declines in deer, moose, beaver, bear, wolves, and ruffed grouse. This is true, and only the renewed occurrence of fires at their natural frequency, or an abandonment of nature and a turn to logging can arrest these trends.

But the successional changes caused by fire exclusion are gradual, and much of the forest of Quetico is still young. The Kawnipi Burn of 1936 (which I first saw in 1939 and have observed several times since) and the Saganagons fire of about 1961 have created large areas of young forests and early successional stages. I am sure there were also large burns in Quetico in 1910, in 1894, in 1864, and in several other major fire years that show up in the BWCA. Thus the forests of Quetico, like those of the BWCA, are certainly far from all being "overmature," and approaching a "sterile" climax stage. (And, incidentally, even climax forests are not really "sterile," as some would have us believe--they too have their characteristic and fascinating plant and animal life.)

The spruce budworm seems to be a native, and it does not permanently destroy forests. It merely kills out concentrations of old balsam, causing their natural regeneration. In a wilderness there is no biological need to "control" this insect. It appears to be nature's check on balsam fir. We may have more balsam and also more budworm until a natural fire regime is restored--to reduce some of the balsam populations. But this is not a calamity. It is a perfectly natural shift, unless we exclude fire indefinitely.

Thus you do have time to move slowly and cautiously toward a full Ecosystem Maintenance program in Quetico. We are certainly not ready to begin the use of prescribed burning in the BWCA either, nor to modify lightning fire control practices. But there is time for the necessary research and management development work. If anything, the age structure of Quetico's forests may give you more time than we have in the BWCA. Even there, we are still not sure how much out of balance the forest age structure is, due to fire protection. Probably we have decades on both sides of the border before this problem becomes crucial. Meanwhile, relevant research on ecosystem maintenance and restoration is underway at several centers.

The awakened interest among Canadians, and indeed of the whole world, in natural ecosystems foreshadows a new era of sensitive Park and Wilderness management. You have a splendid opportunity in Quetico! To me it would be wonderful if Ontario and Minnesota could move together as neighbors with a program

to maintain and restore the whole Quetico-Superior as the natural ecological unit it surely is. I frankly admit that we are still a long way from the kind of program envisioned above in the BWCA, but our public, like yours, is now concerned.

May I close with a plea for young Canadians, and for citizens of Ontario yet unborn. For it is their world and their future options that rest in your hands today. You do not have to get answers to all of the questions I have raised. You do not have to know in detail how Quetico will be managed in the distant future. But you and your government have the power to leave open the choice of maintaining the natural ecology of Quetico, or of irrevocably foreclosing that choice by allowing logging, road-building, and conventional forest management to proceed.

I treasure Quetico as much as many of you--even as much as our own BWCA--and I deeply appreciate this opportunity to communicate with you. If I can help further, I offer your Committee, your government and your people any assistance I can provide.

Respectfully submitted,



Miron L. Heinselman,
Forest Ecologist

Appendix

Enclosures: (These papers give details on the ecosystem maintenance problem for those who may wish to look further.)

1. Heinselman, M. L.
1965. Vegetation management in Wilderness Areas and primitive parks. Jour. of Forestry, 63:440-445, June, 1965.
2. Heinselman, M.L.
1965. Wilderness and National Park management goals. Jour. of Forestry, 63:945-946, Dec., 1965.
3. Heinselman, M.L.
1969. Diary of the Canoe Country's landscape. Naturalist, 20 (1):2-13, Spring, 1969.
4. Heinselman, M.L.
1970. Preserving nature in forested Wilderness Areas and National Parks. National Parks and Conservation Magazine, 44(276):8-13, Sept. 1970.
5. Heinselman, M.L.
1971. Restoring fire to the ecosystems of the Boundary Waters Canoe Area, Minnesota, and to similar Wilderness Areas. Proceedings, Tenth Annual Tall Timbers Fire Ecology Conference, Fredericton, New Brunswick, August, 1970. (in Press, to appear about April, 1971).

Naturalist

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1969



BOUNDARY WATERS CANOE AREA

Naturalist

CONSERVATION THROUGH EDUCATION

*Journal of the NATURAL HISTORY SOCIETY of Minnesota—an independent,
non-profit organization devoted to the study of Nature and Conservation.*

Editor—Clayton G. Rudd

Research in the

Boundary Waters Canoe Area

THE BOUNDARY WATERS CANOE AREA IS UNIQUE in the National Wilderness Preservation System—it is the *only* lakeland wilderness. It contains one thousand and sixty lakes, ten acres in size and larger—more lakes than all but a handful of States can boast. For every five acres of land within this million-acre tract, there is an acre of water. Truly, a water wilderness.

But like all fifty-seven areas in the Wilderness System, the BWCA is faced with two critical problems: (1) preserving, restoring, and maintaining the ecological conditions that *make* it a wilderness, and (2) people. Therefore, when the North Central Forest Experiment Station announced its new program of research in the Winter 1965 issue of the *Naturalist* it included studies of people, plants and animals. These studies, conducted in the relatively undisturbed environment of the BWCA are to help the Forest Service in our complex job of managing wilderness areas. Now after more than three years, it is time that we reported to our "stockholders". So in this issue some of the scientists working in the BWCA share with you results of their efforts.

Our job is not finished. Forest Service scientists still must describe plant communities in the lowlands and disturbed parts of the BWCA as they did the upland Natural Plant Communities. The forest history studies must continue in an effort to determine *when* different plants "come in" on an area following disturbance. Our future efforts are being expanded to include studies on mammals and birds living in the BWCA to learn more about their relationship to the various plant communities.

People problems, social and economic studies of visitors, are occupying an increasing part of our research program. Last year 820,648 visitor days of use were recorded in the BWCA, an increase over 1967 of about 11 percent. More people using the area focuses attention on such problems as water pollution; deterioration of some heavily-used campsites and portages; increasing pressure on the fisheries resource; and conflicting interests between the users themselves. Indications are that these problems are becoming critical in many locations throughout the area. Overuse in some places is not only degrading the environment but is probably decreasing the quality of the outdoor experience for some visitors. We are now planning studies to determine optimum capacity and distribution of visitors so that the public can continue to enjoy the area without destroying it—so that we can have our wilderness and use it too!

The Forest Service is not alone in the study of the BWCA. We are being helped by the Department of Interior, Bureau of Sport Fisheries and Wildlife; Macalester College; the Minnesota Conservation Department; the University of Minnesota; and the Quetico-Superior Wilderness Research Center. These organizations are conducting about 50 different studies in the undisturbed environment of this wilderness area.



LEADER

Northwoods Wilderness Recreation Project
USDA, Forest Service, North Central Forest Experiment Station

CANOE COUNTRY

Ektachrome by Leslie H. Blacklock

The *NATURALIST* is published in Spring, Summer, Autumn and Winter numbers. Subscription rates are \$4.00 per year in the United States and possessions; \$4.50 elsewhere. Single issues of 32 pages are \$1.25 each. Special issues, based on cost, are higher priced. All prices are subject to change without notice. Make checks payable to the NATURAL HISTORY SOCIETY and mail to 315 Medical Arts Building, Minneapolis, Minnesota 55402.

Continuing

OUR 20th ANNIVERSARY VOLUME...



**MUGS, FROM MUG HOUSE,
WETHERILL MESA**

CLASSIC PUEBLO PERIOD A.D. 1100-1300

THERE ARE MANY SURPRISES ON THE MESA VERDE.

Probably some of the greatest are the skills and crafts of the Ancient Ones. There is the quality of the masonry in the Cliff Dwellings. And, the distinctive pottery made centuries ago, to name two surprises.

Archeology tells the feature story of the Mesa Verde, and it is a remarkable one. A superb museum at Park Headquarters presents this story well. What about the impact of the Ancient Ones upon their environment? Articles and illustrations in the Summer 1969 Number of *Naturalist* make a splendid introduction to this home of most fascinating culture. Or, they will add to your knowledge gathered in your visits to Mesa Verde National Park.

CONTINUING ENVIRONMENTAL STUDIES
IN OUR 20TH ANNIVERSARY VOLUME.

Honoring

FRANCIS LEE JAQUES



F. L. JAQUES

Photo courtesy of the American Museum of Natural History, New York City.

Lee Jaques is a man of keen perception. Associated with his perceptive mind is a well-trained and gifted hand. Allan Brooks, internationally respected wildlife artist, has said, "Lee Jaques thinks better in black and white than any other artist." And, Lee excels in other color media. Some of Lee's oils are rendered in magnificent proportion in the great Museums of Natural History in central and eastern America. They must be seen to be appreciated for they are painted in select color and in excellent composition. The Whitney Hall of Birds of the South Pacific in the American Museum of Natural History of New York is enriched by a splendid array of colorful natural backgrounds painted by Lee Jaques. A visit to this wing of the Museum alone will enhance any visit to the big city. The habitat backgrounds of the Museum of Natural History of the University of Minnesota are positive proof of his masterly touch.

It is for his superb rendition of the landscape of the Canoe Country that we honor him in this issue. His contribution to the perpetuation of the Wild quality of the Canoe Country is to be found in capturing the lure of that Waterway Wilderness so that others may enjoy it more.

A handwritten signature in dark ink, reading "Clayton S. Rude". The signature is fluid and cursive, with a large, sweeping "C" at the beginning and a long, horizontal stroke at the end.

OUR 20TH ANNIVERSARY VOLUME.





SEA GULL LAKE FROM THE PALISADES

Photo by Leslie H. Blacklock

Diary of The Canoe Country's Landscape

M. L. Heinzelman¹

AS YOU PADDLE THE LABYRINTH of wilderness lakes and streams of the Superior-Quetico canoe country, forested land creates the scenic backdrop for your voyage. On portages and at campsites you will come to know these forests intimately, and as you note the details you may sense their endless variety. In some areas the trees are young and small; in others they are large and old; and the species often change abruptly. On Moose and Newfound Lakes, for example, the ridges are timbered with young aspen and birch, with occasional spruce or fir beneath them, and here

and there a patch of pine. In Lac La Croix, or on the islands of Saganaga, there are magnificent stands of old red and white pine. And on Cherry and Topaz Lakes, endless stands of dense young jack pine clothe the ridges. Why this diversity? The answer lies in the region's ecological and human history, as well as in the effects of local soils, bedrocks, and relief.

The Canoe Area's forests are actually a patchwork of virgin forests, interspersed with "second growth" stands on land cut during the early logging era or more recent times. Complicating this picture is a long his-

¹Principal Plant Ecologist, North Central Forest Experiment Station, Forest Service, U.S. Department of Agriculture, Folwell Avenue, St. Paul, Minnesota 55101.

tory of forest fires, dating back into presettlement times.

A study of the forest history of the Boundary Waters Canoe Area, begun in 1966 at the North Central Forest Experiment Station, is unraveling this fascinating story. In this research I have tried to answer in detail the question...“How did we get the present forest landscape?” We must understand the origin and natural history of both the remaining virgin forests and the disturbed forests in our effort to preserve or restore the natural scene.

Information was obtained by three means: (1) Studying maps, literature, old photographs, and file records; (2) interviewing early residents, forest officers, and others, and (3) field studies throughout the area.² The field work involved checking the limits of early logging, getting the ages of thousands of trees, determining when past fires occurred, and tracing fire boundaries with maps, airphotos, and ground checks.

“Natural” forests are considered those composed of native species, resulting primarily from environmental factors present before settlement (and potentially still effective, including such natural disturbances as windstorms, insect outbreaks, and fire), or from gradual successional change. They have not been altered by logging, land clearing, or other direct activities of modern man. Such forests can also be considered “virgin” if fire, wind, and insect outbreaks are accepted as part of nature. Most of us think of ancient stands of large trees when we speak of virgin forests. But such forests often had their beginnings in new growth that followed fires or other disturbances, and there is no rational basis for confining the term “virgin forests” to old stands.

Before considering the dramatic history of these forests we need a quick look at some of the factors that determined their character. Natural forests are ever-changing complexes of trees, shrubs, herbs, mosses, and lichens. The Canoe Area's forests are particularly dynamic because the trees have a relatively short lifespan of 100 to 400 years. And the overstory trees in most of the natural forests are more or less of the same age within stands. This is because they became established after natural catastrophes such as windstorms, insect outbreaks, or wildfires. Such disturbances have always eliminated old forests periodically and initiated new plant communities.

Some trees, such as jack pine, red pine, black spruce, and aspen, are sun-loving “pioneers” that reproduce most effectively when fires or windstorms destroy old forests, leaving open areas and suitable seedbeds. Others, such as white spruce, balsam fir, cedar, and red maple, are capable of reproducing in the shade, and in youth often grow beneath the pines and aspen—waiting to replace them when they die.

Fire prepares the way for new forests by reducing

²Many people aided these studies. I particularly want to thank the staff of the Superior National Forest and L. R. Beatty, J. A. Bolz, E. J. Cushing, S. S. Frissell, G. A. Limstrom, W. H. Magie, L. C. Merriam, Jr., E. C. Oberholtzer, S. F. Olson, F. W. Stearns, E. C. Stone, J. W. Trygg, J. W. White, J. F. Wolff, H. E. Wright, Jr., and my wife Frances.



THE COLEMAN ISLAND FIRE, June 1967, on Lac La Croix killed this jack pine stand and seared the trees to their tops. Thousands of persistent cones remained on the trees containing living seed for a new forest. The cones are *serotinous*, that is, they remain closed for years. Only the heat of a fire, which melts the sealing waxes, will open them.

competition for moisture, light, and mineral nutrients when it kills the overstory trees and temporarily eliminates shrubs and ground vegetation. It also removes much of the organic layer on the ground, which prevented the establishment of tiny new seedlings of many trees, and it releases the storehouse of essential mineral nutrients in these layers.

Most of the trees in the Canoe Country have evolved special adaptations to fire. One of the most fascinating is the closed-cone habit of jack pine. Its cones are borne high in the crowns where they persist and remain closed for years. When fires rage through the stands the trees are easily killed, and even the upper crowns and cones are often scorched. But usually temperatures inside the cones remain below lethal levels, and the waxes that have sealed the cone scales melt. After the fire passes, the cones open and release thousands of seeds to regenerate a new jack pine forest. Black spruce has similar habits, although its cones are not so tightly sealed.

Red and white pine have a different adaptation. Their cones open and fall each year, but their thick bark and tall clear trunks make older trees relatively fire resistant. Eventually, however, a crown fire may sweep through the forest and kill most of the stand.

But scattered individuals or groves in favorable spots often escape and become the sources of seed that reforest the burn. Good seed years are infrequent, and several years are often required to reestablish these species. Fire scars on the bases of many old pines attest a long history of such fires in the Canoe Country. Thus arose the famous "pineries" of the old North Woods.

Aspen and paper birch have yet another adaptation to fire. They are readily killed, but resprout from either the roots or base of the tree. Both also have light seed, easily blown great distances by the wind. They thus have a double advantage, and were often the major species to reforest the cut-over areas when seed sources for the pines were eliminated by logging and slash fires.

In primeval times fires were caused both by lightning and by accidental or deliberate firing by the Indians, and later by the Voyageurs. But both lightning and man-caused fires were part of the ecology of the region. Layers containing charcoal and charred cones in Minnesota peat bogs and glacial deposits have been radiocarbon-dated at from 3,000 to more than 38,000 years ago, documenting fires in the environment long before white men saw these forests.

FIRE—A NATURAL DISTURBANCE—HAS BEEN PART OF THE CANOE COUNTRY ENVIRONMENT FOR THOUSANDS OF YEARS.





JACK PINE CONES OPENED BY THE HEAT OF THE COLEMAN ISLAND FIRE SHED THOUSANDS OF VIABLE SEEDS ACROSS THE LANDSCAPE.

THOUSANDS OF TINY JACK PINE SEEDLINGS OCCUPY THE COLEMAN ISLAND BURN TWO MONTHS AFTER THE FIRE.

After 150 to 400 years without fire, the shade-tolerant balsam fir, white spruce, cedar, or red maple may replace the pioneer tree species—the time depending on the original overstory species, windstorms, and other factors. But the shade-tolerant trees have their enemies too, and for balsam and white spruce it is the spruce budworm. This native insect has repeatedly ravaged mature forests of these species. Again nature has a defense: many tiny balsam seedlings usually escape the budworm, and form the nucleus for a new stand.

Today the virgin forests occupy about 40 percent of the Boundary Waters Canoe Area. The balance has been logged, either in the early “cut-out and get-out” era, from about 1895 to 1930, or under controlled National Forest and State timber harvests which began in the late 1930’s (see map—center spread).

Field studies in the virgin forests indicate that at least 80 to 90 percent of these areas were burned by forest fires one to several times in the last 300 to 400 years. Most of the overstory trees you see today date from one or more of these fires. Fire has therefore been the principal cause of forest renewal.

The oldest stand found dates from a disturbance, probably a fire, in about the year 1595. It is a stately grove of old, fire-scarred red pines on Three Mile Island in Sea Gull Lake. The record tree was 371 years old in 1968—already 63 years old when Radisson

and Groseilliers first explored the border lakes, foreshadowing the fur-trade era! The old pines were scarred by fire in 1692, and again in 1801. Nearby are stands of red pine or jack pine dating from these later fires.

There must have been fires about 1648 also, for the scenic old pines along the north shore of Alder Lake, and on Gaskin Lake date from this period.

Great fires burned throughout the Lac La Croix region between 1677 and 1692. Many of the beautiful old red and white pine groves in Boulder Bay, on the islands in La Croix, on Agnes, Oyster, and Ramshead Lakes, and elsewhere date from these fires. In the Gunflint country the oldest pine forests on Saganaga, Rose, and Caribou (near Gaskin) Lakes seeded in after fires of this same period. For the next 150 years, countless brigades of Voyageur canoes were to pass these stands, just as you may this summer!

There are scattered records of fires across the area in about 1713, 1727, 1735, 1741, and 1747, but the next really widespread fires occurred between 1755 and 1760. You may camp in or explore the red and white pine forests that occupied these burns on Lac La Croix, the Moose River, Big Moose Lake, Saganaga, Duncan, and Rose Lakes. These fires occurred 25 or 30 years after La Vérendrye built the first trading post on Rainy River.

The oldest living jack pine stands seeded in on a



1755-1759 burn in the Echo Trail country. Here, in a broad band between the Moose and Sioux Rivers, south of Nina Moose, Ramshead, and Meander Lakes, are scattered, knarled, and decadent old jack pines—still dominating the landscape. These trees are about 210 years old—an incredible age for jack pine! The beautiful grove of red pine at the Moose River canoe route access north of the Echo Trail dates from this same burn.

Several stands of pine on the islands of Saganaga date from fires about 1769, and south of Coleman Island along the shores of Lac La Croix you can enjoy old pine forests that followed a 1784 burn.

The next major fire year was 1796, in the heyday of the North West Company fur trade. Red and white pine stands that occupied these burns can be seen along the north bank of the Boulder River near its outlet into Boulder Bay, on the east side of Ge-be-on-e-quet Lake, and on the Clearwater Road (Gunflint area), near the west end of Clearwater Lake.

In 1801 great fires swept from the Gabimichigami-Tuscarora Lakes area to Saganaga and the Granite River. Extensive forests of old decadent jack pine, black spruce, and aspen dating from these burns can be seen on American Point and Red Rock Bay of Saganaga, near Trail's End Campground, and on Sea Gull Lake, and below Horsetail Rapids on the Granite River. Another area of pine, spruce, and aspen dating from 1801 occupies much of Winchell Lake, and extends northward across Omega and Henson Lakes. The 1801 fires may have been even more extensive, but the evidence has been obliterated by later fires to the southwest.

Merger of the Hudson's Bay Company with the North West Company in 1821 caused a shift in fur operations away from the boundary canoe route, and the Voyageur's era drew to a close. John Jacob Astor's American Fur Company operated in the border country for several more years, but the great fur brigades of the Montreal Fur Trade were no more. About this same time, however, exploration of the region by military parties and others seeking travel routes to the west intensified.

About 1822 a large fire swept northeastward from the Burntside Lake-Slim Lake-Hook Lake area to Big Lake, the Hegman Lakes, Anglemore Lake and Thursday Bay of Crooked Lake. The scenic pine groves along the Echo Trail from First Lake to Big Lake date from this burn, as does the red pine stand at the Hegman Lake picnic area.

In 1824, and 1826 or 1827 fires again struck the region. Stands of jack pine on Bald Eagle, Gull, and Pietro Lakes and on Cross Bay Lake date from 1824 burns. Jack pine and red pine forests dating from 1827 occur on the northeast end of Knife Lake and on Amoeber Lake. Some of the pine on Cummings Lake dates from a fire about 1834.

From 1835 until 1852 there apparently were few fires. There are, however, jack pine stands dating from burns in about 1846 on Bald Eagle Lake and in the Cross Bay-Rib Lakes area.

Large fires again broke out about 1852-54. The largest burned an area northeast of Gabimichigami, Little Saganaga, and Tuscarora Lakes. Pine, aspen, birch, and spruce forests dating from this burn occur intermittently through this area. The jack pine stands on the Little Saganaga-Rattle Lake portage, along the north shore of Tuscarora, and on Bat Lake are examples. Again, this burn may have been even larger, but later fires could have obscured its boundaries.

Weather records from St. Paul, and a diary from Fort Garry, Manitoba, indicate that 1863 and 1864 were among the driest years yet recorded. Great forest fires occurred in the Canoe Country and throughout northern Minnesota, especially in 1864. Much of the forest in the Echo Trail Region, from Big Trout and Cummings Lake north to the Canadian border was burned. Fires burned at least as far east as Iron Lake, but many of the old red and white pine stands on La Croix, Agnes, Green, Rocky, Ge-be-on-e-quet, Gun, Slim, Ruby, Oyster, Ramshead, Lamb, and other lakes survived these fires. A second wide band of 1863-64 burns runs northeastward from outside the Canoe Area southwest of Lake Isabella, and from almost as far east as Sawbill Lake, to Sea Gull Lake and Cypress and Swamp Lakes on the Canadian border. Most of the jack pine, aspen, birch, and spruce stands on such favorite canoeing lakes as La Croix, Agnes, Pocket, Eugene, Hudson, Insula, Kawishiwi, Polly, Cypress and Ester date from these burns. There are also some 1864 stands on Clearwater Lake and elsewhere in the eastern Gunflint country.

Just after these fires the "Vermillion Gold Rush" began. The Vermillion Trail reached Lake Vermillion from Duluth in 1869, and numerous prospectors, "timber lookers," and would-be settlers began to probe the wilderness lakes.

In the summer of 1875 another major outbreak of fires occurred. The largest burns included most of the country between Kelly, Smoke, Flame, Sawbill, Alton, Grace, and Hazel Lakes on the south; Cherokee, Frost, Little Saganaga, Gabimichigami, Ogishkemuncie, and Kekebabic on the east and north; and Fraser, Alice, Insula, Malberg, and the Phoebe River on the west and southwest. Much of the country within this burn, west of a line from Alton Lake to Mora Lake, seems to have been within the 1863-64 burns also, and perhaps even within the 1852-54 and 1801 burns. Such a history of repeated fires at short intervals may explain the scarcity of conifers and open character of the forest in much of the region. The pines, spruces, balsam, and cedar cannot reproduce effectively if eliminated at such short intervals because they do not produce much seed until they are

15 to 50 years old. Today the country around Wine, Mesaba, Dent, and Hub Lakes contains mostly the broad-leaved trees, such as aspen, birch, and red maple which can reproduce from sprouts, and many shrubs. Because of this vegetation, the area supports many moose, deer, beaver, and timber wolves.

Other large 1875 burns occurred near the west end of Crooked Lake north of the Echo Trail, in the Gunflint area, on Bald Eagle, Turtle, and Pietro Lakes, and elsewhere.

Prospecting for iron developed in the next decade, and the first iron mine on the Vermillion Range opened at Tower in 1884. Mining also began in the new town of Ely a few years later.

The years 1881, and 1885 through 1892, mostly had below normal fire-season rainfall, and there are scattered forest stands dating from fires in this period throughout the region—especially in the east around Alder, Crystal, Canoe, and Pine Lakes.

The summer of 1894 was catastrophically dry, and major fires again swept the western Echo Trail country, from Big Trout and Jeanette Lakes northeastward to Lac La Croix and Crooked Lake. (This is the year of the great Hinckley fire in which so many people perished.) Extensive jack pine, black spruce, and aspen stands, and occasional areas of red and white pine that occupied these burns form much of the present forest landscape on such lakes as Loon, Pauness, Finger, Thumb, Steep, Ge-be-on-e-quet, Iron, and Crooked.

About 1895 the first logging began in the present Canoe Area (see map, center spread). What was the condition of the forests at this time? Many of the areas not destined for the saw already supported the same forests that occupy these areas today. But they were mostly areas that had burned-over in one or more of the fires just described. They did not interest the loggers because most of the timber was either too small, too scattered, or of the wrong species. Jack pine, aspen, birch, spruce, and fir predominated as they do today, but there were also patches of red and white pine—too young, or too limited in area to interest the timbermen. The land-burned by the fires of 1863-64, 1875, and 1894 was still desolate and covered with charred snags. Nobody paid much attention to the thickets of young trees that are the forests of today (although they are described in the U.S. Land Office Survey records).

However, several large bodies of fine old white and red pine had survived all of the fires since about 1760. Their locations are shown in a report of the U.S. Geological Survey of 1899. They occurred in the Loon River area; in the Big Trout and Crab Lakes area; around Fourtown, Basswood, Fall, and Wind Lakes; around Moose, Snowbank, Ensign, Ima, Thomas, Fraser, Knife, and Kekekabic; in the Farm Lake-Kawishiwi River-and Lakes 1, 2, 3, 4 chain; in

the east around Brule, the Cone Lakes, and Swan Lake; and in the Daniels, Clearwater, Bearskin and eastern Pine-Pike Lakes country. These are the areas that were to be logged in the ensuing 35 years. By 1895 to 1900 most had been acquired by the timber interests or by "homesteaders."

By 1893 Winton and Tower were burgeoning saw-mill towns. The timber tributary to the Swallow-Hopkins and St. Croix Lumber Company mills at Winton was mostly transported by stream-driving and rafting, with only short railroad spurs and portages (such as the Four-Mile Portage). Remains of some of the old log dams, sluiceways, and railroad grades can still be seen in the Canoe Area. Except for a spur to Gun Lake, northwest of Fourtown Lake, no railroads in the Ely-Winton area penetrated far into the area.

The last big operations in the west were those of the Virginia-Rainy Lake Company. This firm built a system of rail spurs in the country southwest of Loon River, leading to their main line which fed the logs to the mill in Virginia. (I still remember, as a boy, seeing the last of these logs going through the huge saws in that mill, about 1928).

In the Gunflint country much of the logging was done by the General Logging Company, a Cloquet-based firm. They built a long rail line tapping timber in the Brule Lake and Clearwater-Hungry Jack areas, connecting with Cloquet via the Alger-Smith line. (The old General Logging Company grade swings around the edge of the BWCA south and east of Brule Lake, and proceeds northward to Clearwater and Daniels Lakes. It is now the location of several National Forest roads.) This firm ceased operations not long after the disastrous Brule Lake fire of 1929, which burned some of its remaining timber. Simultaneously, the Great Depression of the thirties began, and the timber industry declined to a low level for nearly a decade.

It was big pine that the early lumbermen sought, and at first little else was cut. Later some spruce was taken for pulpwood, fir for lath and studs, and cedar and tamarack for poles and posts. Other species were also sometimes cut for ties and other products, but the main interest was always in pine sawtimber, and the mills had more capacity than their land could support. Operations were therefore on a liquidation basis, and there was little real concern for the land after cutting. State law required that slash be burned.

These circumstances inevitably led to numerous post-logging fires. The history of several areas is therefore little different from that of other regions in Minnesota. We know, for example, that much of the Virginia-Rainy Lake Company's slashings south of the Loon River burned in 1917, in 1923, or in both years. Much of the country between Big Trout Lake and Pine Lake burned in 1920. Many cutovers around Fourtown Lake, adjacent to Jackfish Bay, Pipestone



MAGNIFICENT OLD PINE GROVES ON LAC LA CROIX SEEDED-IN AFTER FIRES
IN 1600, 1755-59, 1784, and 1796. This red pine grove is on Lady Boot Bay.



Bay, and Hoist Bay of Basswood Lake, and near Fall and Newton Lakes burned in 1920 or 1923. Much of the country between Wind Lake, Bayley and Merriam Bays of Basswood, around Moose, Newfound, and Ensign Lakes, and north of Snowbank Lake burned in 1910. And there were large fires east of Snowbank Lake and between Ima, Kekekabic, and Big Knife Lakes in 1918 or 1919.

With the red and white pine seed sources removed by logging, these species failed to regenerate in many of the slash fire areas. Today the forests are largely aspen, birch, fir, and jack pine. There are exceptions, however, where small groups of seed trees escaped. Also, many cutovers did not burn, and in some such areas new pine stands developed from saplings that were left after cutting. There were several fires on the public domain land beyond the logging areas in 1900 and 1904, and these areas did largely regenerate to conifers.

In 1909 President Theodore Roosevelt established the first units of the Superior National Forest on the remaining public domain land. This was largely the recently burned land passed up by the timbermen.

Several large areas now part of the Canoe Area were not included because they were then in private ownership. In general, they were the areas logged before 1930, just described (see map—center spread). They were not to become part of the National Forest until tax delinquencies made them available for purchase in the 1930's.

Within a year after the new National Forest was proclaimed, large areas untouched by the lumbermen again burned. The four largest of these 1910 burns were in the Cummings-Big Moose Lake area, the Wilder Lakes area, the Knife-Amoeber-Cherry-Hanson area, and the Sea Gull Lake to Granite River area. This was the year of the disastrous Baudette fire, and the new forest patrolmen were powerless against these conflagrations. Today, as you approach Trails' End on the Gunflint Trail, you drive through dense jack pine stands that occupy a 1910 burn. Another serious fire burned the Fire Lake country in 1916.

The last really large fires to burn uncut forests in the Canoe Area came in the catastrophically dry summer of 1936. In July and August thousands of acres went up in smoke in the "Cherokee Fire" (Cherokee Lake to Brule Lake), the "Frost Lake Fire" (north of Frost and Long Island Lakes), and the "Canadian Outbreak" on Rose Lake. Hundreds of CCC enrollees and Forest officers valiantly fought these and many other fires for weeks. Stands of jack pine, spruce, aspen, birch, fir, and in places red and white pine now clothe these 1936 burns.

About 1940 the systematic harvest of jack pine and spruce pulpwood and red and white pine saw logs began on the National Forest and State land of the Canoe Area where logging is permitted (refer to map—

center spread). This area is now called the Portal Zone. Operations are supervised by professional foresters, and measures are taken where necessary to insure a new stand of trees. A 400-foot strip of uncut forest is left along lakes, streams, and portages to protect scenic values, so you may not notice these cuttings.

Let us return now to the remaining natural forests and summarize what is known of their recent ecological history. Not much is yet known of the forests consumed by the fires of 1595, 1677-92, 1755-59, 1796, 1801, 1822, 1827, 1852-54, 1863-64, 1875, 1894 or even 1910. Some were clearly stands of large white and red pine, because large snags or even fire-scarred veterans still exist in certain areas. And stands of these species postdating certain fires are known in many areas. But there are also numerous areas where jack pine, aspen, birch, spruce, and balsam clearly occupy land that once supported red and white pine. The Land Office Survey records also often mention large bodies of old pine killed by fires. Yet in many areas all the evidence suggests that jack pine, aspen, birch, spruce, and balsam have dominated the landscape for a long time.

THIS OLD RED PINE ON SEA GULL LAKE BEARS SCARS FROM FIRES IN 1692 AND 1801.

Thus we really do not know to what extent this long series of fires altered the species or age structure of the natural forests. Individual stands have clearly been changed—but what of the shifting total mosaic? We likewise do not yet know how this fire history differed from the “natural” fire regime before the white man arrived (see article by Cushing in this issue). There is a suspicion that fire occurrence increased during the period of exploration and settlement, but we are not sure how much.

One thing is certain, however. The proportion of the Canoe Area occupied by mature white and red pine was greatly reduced by the early logging because these were the very stands cut. Fortunately, many fine old stands do still exist in local areas within the natural forests, especially where topography or water bodies provided some natural protection from repeated fires. Many of the best pine stands cut by the lumbermen were also located in such naturally protected areas around the larger lakes. These relationships suggest that white and red pine need some natural fire protection, and were always more common in such protected places.

Less dramatic changes than those wrought by fire also occurred. With good fire protection over the



past 40 years, the gradual invasion of pine, aspen, and birch forests by balsam, spruce, and cedar progressed remarkably. By 1956 the balsam and spruce had matured sufficiently to support a major spruce budworm outbreak. Since then, this insect has killed much balsam over many thousands of acres. And major windstorms have blown down old forests in various areas.

Today, the virgin forests of the Canoe Area are among its truly great resources. These are the last large remnants of the old North Woods. Here, and only here, can you still travel for days through forests little changed by modern man. And only here can the ecologist hope to answer some of the questions raised by this discussion, and in the articles by Drs. Ohmann and Ream, Wright, and Cushing. The Lac La Croix region still contains about 100,000 acres of natural forest within the Interior Zone, and there are some 175,000 acres in the region between Hudson and Insula Lakes and Big Saganaga. Another 25,000 acres occur east of the Gunflint Trail. These forests are just as "pristine" as many in our western Wilderness Areas—more so than some because they have not had livestock grazing as have some western areas. Fire has clearly been a prominent ecological factor—

but so has it in many western areas. In neither case do we know how much fire is "natural."

The implications of this history for future wilderness management, and to you, the public, are significant. First, the areas that were logged in the lumbering era are now well identified, as are the remaining natural forests. It remains to be determined just how much the forest communities in the Interior Zone were really modified by that disturbance. When you next visit the Canoe Area, I hope your vacation will be enhanced by increased understanding of the area's human and natural history.

Future managers of the Canoe Country must wrestle with the difficult problems of maintaining its primitive character, knowing full well its dynamic history. Protection from wildfires must continue because of the danger to visitors, adjacent communities, and to commercial forests in the Portal Zone and outside the BWCA. With our Canadian neighbors immediately to the north, there is also a clear international responsibility. But fire was a prominent environmental factor in the primeval forests, and if natural conditions are to be retained, the substitution of prescribed fires for natural wildfires might be considered.

FIRE SCARS TELL OF FOUR ANCIENT FIRES ON THIS SECTION FROM A FIRE-SCARRED RED PINE. COUNTING ANNUAL RINGS FROM THE BARK TO EACH SCAR GIVES THE YEAR!





Forest History of the BWCA Since the Last Glacial Period

H. E. Wright, Jr.¹

A FOREST IS NOT A STATIC FEATURE of the landscape. Changes during the march of seasons are the most obvious, of course, for deciduous trees and shrubs lose their leaves, and the herbs and mosses of the ground cover die back. But changes from year to year are also apparent, as young trees grow and bear fruit, and old trees die and fall to the ground. Openings made by a fallen tree may not always be filled by a seedling of the same species, either because of accident or because conditions for germination or growth have changed—perhaps the conditions of shading are different, and some seedlings will not grow well without abundant light. In fact in many forests a definite succession is evident, with one dominant tree giving way to another.

These minor successional changes can be readily studied in the field by measuring the ages of trees through tree-ring counting, and ecologists and foresters do this to reconstruct the past condition of the

forest or to predict its future development.

The seasonal changes and the minor tree-by-tree 'successional changes depend on constancy of external conditions. But external conditions are rarely constant, and the entire succession may be thrown out of balance or interrupted by such natural disturbances as fire, disease, or flooding, or the succession may be modified as a result of climatic change, evolution of the soils and landforms, or introduction of different plant species to the region.

Such changes as these can be studied less effectively in the field, because they may occur so rarely or so slowly. Of course if a fire happens during the time of study, then the succession can be observed in detail, but fires rarely occur today in well-protected forests, and the role of fire is therefore not easily evaluated by such direct observations. A past fire is sometimes recorded by scars on trees that survived the fire, and its date can be determined by tree-ring counting. By

this means Dr. Heinselman has worked out the fire history for a large part of the BWCA for the past 150-300 years, and he has even been able to map the distribution of the major fires since the early explorers and voyageurs traveled through the country.

But even if we do learn something about the role of fire in forest succession from fire-scar and tree-ring studies in the BWCA, there is danger that the information will not be applicable to completely natural conditions. The incidence of fire in the BWCA during the past 300 years may not have been normal, for this was the time of exploration, fur-trading, and ultimately lumbering, and the very fact of greater traffic in the forests may have resulted in a more common occurrence of fire. On the other hand, during the last 30 years there have been practically no fires in the BWCA, because of protection by the Forest Service, and soon, in the continued absence of fire, the forest may take on a rather different aspect.

How can we determine the long-range forest composition or successional trends that prevailed in the BWCA before the advent of white man? How can we evaluate the long-term effects of changes in climate, soils, or species composition? What we must have is a record of prehistory, extending over the entire 10,000 since the area was bared by the retreating ice sheet.

Such a record is found in lake muds, for these sediments contain, layer by layer, the pollen grains blown from the surrounding vegetation. Although different species of trees and shrubs produce and disperse different amounts of pollen, still a percentage analysis of the pollen types in a lake sediment provides a rough idea of the forest composition on the hills slopes surrounding the lake, or even of the entire region. Careful pollen analysis of successive layers of sediment can thus reveal changes in forest composition—sudden changes induced by such a catastrophic event as a fire, and slow changes brought by other external factors.

The following article by Dr. Cushing describes the technique by which the fire history specifically can be worked out by pollen analysis. The rest of the present article will describe the long-range changes in forest composition that can be attributed to post-glacial changes in climate and soils and the introduction of new species.

The continental ice sheet formed a ridge of glacial deposits—a moraine—south of Lake Vermilion about 15,000 years ago, and soon thereafter it retreated across the area of the BWCA. Much stagnant ice was left behind, especially in the lowlands between rocky hills, and it did not melt out everywhere for

STUDIES OF LAKE SEDIMENTS BY UNIVERSITY OF MINNESOTA SCIENTISTS WILL REVEAL DETAILS OF FIRE HISTORY AND FOREST SUCCESSION PRIOR TO THE ARRIVAL OF WHITE MAN. HERE A RESEARCH TEAM IS TAKING SEDIMENT CORES FROM LAKE OF THE CLOUDS.



several thousand years. But wherever it melted it left behind a depression that ultimately became a lake. The lakes were colonized immediately by aquatic organisms, and the remains of these and subsequent organisms are preserved as sediment in the lake bottom along with the pollen grains blown in from the vegetation of the surrounding hill slopes.

Although pollen analysis of lakes in the BWCA itself is just being started, a study of a small bog lake (called Weber Lake), near Greenwood Lake in the Superior Forest about 30 miles southeast of Ely, revealed a sequence that is probably characteristic for northeasternmost Minnesota. It is shown in the accompanying pollen diagram, in which the vertical scale is depth (and thus time) and the horizontal scale shows the percentage of major pollen types.

For a long time after the active ice retreated from the region, the vegetation was a kind of tundra—like that found today in northern Canada, with no trees except perhaps some spruce in sheltered localities. The commonest pollen types found in the lake sediments of this period are those of sedges, grasses, and small herbs. Fragments of leaves and seeds of specific tundra plants have been found in the sediments. The cold climate implied by this collection of plant remains probably reflects the influence of the nearby ice sheet, which still filled the Lake Superior basin during this period. Meanwhile southern Minnesota was covered by a closed spruce forest, as indicated by comparable pollen investigations at other localities.

The tundra prevailed in the area until almost 10,000 years ago, when the accelerated climatic change that brought about final retreat of the glacier from the Great Lakes region also allowed the spruce forest to advance into the tundra, after a brief phase in which dwarf birch was abundant. Larch and black ash were common in the spruce forest around the lakes, but no pine was present on the uplands, unlike the situation today in the Canadian forests, where jack pine is generally found in regions wherever spruce occurs.

At the same time, farther south in east-central Minnesota, the spruce forest, which had prevailed throughout the Middle West south of the glacial border for thousands of years, became abruptly and completely replaced by jack pine, with perhaps red pine as well. The jack pine had survived the glacial period far to the east in the Appalachian Mountains. As the ice retreated from the Great Lakes region, jack pine migrated westward with great rapidity. It reached eastern Minnesota about 10,000 years ago and spread almost immediately to the north. It was soon joined by paper birch and even some elm as major forest types, and by 9000 years ago these trees were probably more common than spruce in the BWCA. White pine was not involved in this succession.

The climate continued to become warmer. Alder and fir replaced larch and ash in the moist ground around lakes and bogs about 8500 years ago. White pine abruptly invaded Minnesota from the east about 7000 years ago, and it soon spread to the BWCA, where it dominated the forest for several thousand

years during mid-post-glacial time. This was the interval of maximum warmth and dryness, when prairie expanded eastward to a line extending from Itasca Park to Aitkin to Pine City—about 75 miles northeast of its present limit. The effects of the prairie expansion can be seen at Weber Lake deep in the Superior Forest Area by the slight maximum of ragweed and chenopod pollen, which was blown to this area from the prairie areas not far to the west.

The period of warmth ended about 5000 years ago. In the BWCA the white pine was partly replaced by red pine and jack pine, and it began to migrate westward, reaching Itasca Park about 4000 years ago. Birch, spruce, and larch became more abundant in the BWCA. Some of the smaller lakes were nearly filled with sediment by this time, and they became overgrown with bogs. Bog growth may also have been favored by the fact that the cover of conifers on the slopes had by this time resulted in the deep leaching of the soils and the gradual reduction in mineral nutrients coming to the lake margins with surface runoff—a situation favorable for the development of bog plants.

This was the situation in northeasternmost Minnesota until the coming of white man. The long-range trends in forest history indicate that the climate then was about the same as it was about 9000 years ago, scarcely 2000 years after the final retreat of the ice sheet from the Great Lakes region. The cooling trend of the last 5000 years is evident in north-temperate latitudes across North America and in Europe as well. There is no reason to believe that it will not continue, and that ice sheets will not grow once again in the north, as they did at least four different times during the Ice Age.

But the natural successional trends in the forests of northeastern Minnesota, which reveal these climatic changes, were vastly upset by the era of timber cutting, which began about a century ago. Although the effects of lumbering on the vegetation and the pollen sequence have not yet been examined in detail, the study at Weber Lake showed that the pollen proportion of white pine decreased abruptly at the same level as the rise in pollen of ragweed—the index of agricultural disturbance. Probably the selective cutting of white and red pine, along with the spread of jack pine on lands that had been cut and burned, accounts for the change in pollen proportions. Study of the detailed pollen succession of the last few centuries in the BWCA, as well as in other parts of northeastern Minnesota where forest cutting has been more severe, will give insight into the degree of modification of the natural landscape by man's activities. With our knowledge of the long-range forest history throughout post-glacial time, we can place the changes of modern forest in the context of the natural changes that have resulted from slow climatic fluctuations, gradual leaching of the soils, or immigration of dominant tree types from other regions. Then with the detailed studies of fire history, as described in the following article by Dr. Cushing, we can appreciate the major natural disturbances and other short-range changes that are locally superimposed on the regional trends.



SNOW MANTLED PATRIARCH

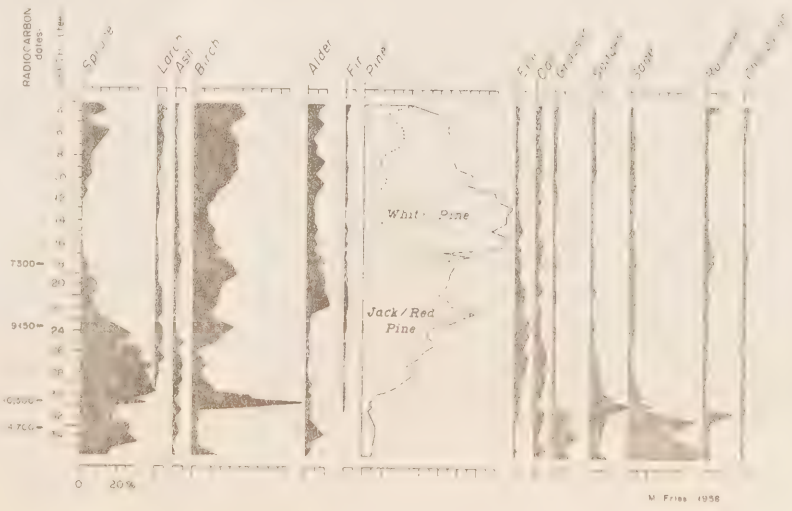
Agfachrome by J. Arnold Bolz

POLLEN DIAGRAM FOR THE SEDIMENTS OF WEBER LAKE.

Figure 1.

WEBER LAKE

The curves show the percentage of pollen of major tree and herb types throughout the depth of the sediments. Radiocarbon dates indicate the years before the present at four different levels. The original pollen counts were made by Magnus Fries. Identification of the two different pine types was determined by Junko Ogawa.





The Changing Landscape

Clues from the Canoe Country's Lakes

Edward J. Cushing¹

FORESTS, WATER, AND ROCK: these are the conspicuous ingredients of the landscape of the Boundary Waters Canoe Area, and the casual visitor to the area may carry home with him a memory little more detailed than that. The alert and experienced traveler, however, delights in the countless variations and combinations of these basic ingredients; the Area is in fact a mosaic of different landscapes, each characterized by unique kinds of topography, rocks, lakes, and vegetation. Have these landscape units always had their present character? To the transient guest, the landscape may seem immutable and unchanging, but the long-term resident is aware of gradual changes in the vegetation as young forests mature on logged or burned-over land. Are these slow changes a recent feature of the

landscape, or are they themselves a vital part of the scene?

Man's life span is too brief for easy comprehension of processes that may take centuries, and to understand the changes in the forests we need the time perspective of the plants that participate in them. Forest trees in the BWCA have a life span of many decades to several centuries. Some of the understory plants of the forest, such as the blueberries, may live even longer, for they have underground stems that can survive forest fires. Repeated disturbances that seem widely spaced to man may have a frequency that is critical to the survival of populations of such long-lived plants.

That the frequency of forest fire has a profound

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effect on the vegetation of the BWCA is demonstrated by the careful work that Dr. Heinselman describes in this issue. But the record he has read from tree rings is limited by the age of the oldest living trees and by the uneven distribution of survivors of the fires that produced new generations. That long-term shifts of climate have changed the overall vegetation of the BWCA is documented by pollen analysis, as reviewed by Dr. Wright in the preceding article. But these changes spanned several generations of forest trees, and so far the pollen record has told us little about the shifts from one generation to another and how they led to the present landscape mosaic. Was forest fire as important in shaping the vegetation in the centuries before 1700 as Dr. Heinselman's studies show it has been since? Have slopes that now are covered by jack pine been so clothed ever since the climate became like the present? Or did those slopes once support stately groves of red or white pines that succumbed to some ancient fire?

Because some of the lakes in the BWCA contain an unusual kind of mud, we hope to be able to answer questions like these. The sediment at the bottom of lakes contains a record of the pollen that has been shed from plants nearby as long as the lake has been in existence. But in most large or shallow lakes, currents and bottom-living animals keep the sediment stirred up, so that short-term events, such as the destruction of a mature forest by fire, become blurred in the record and impossible to detect. The BWCA has a number of lakes that are relatively small yet deep,



LAKE SEDIMENT AS IT APPEARS THROUGH A MICROSCOPE. POLLEN GRAINS OF SPRUCE, PINE, WHITE CEDAR, BIRCH, AND ASH ARE SHOWN; THE BLACK ANGULAR PARTICLES ARE FRAGMENTS OF CHARCOAL. THE LARGEST POLLEN GRAIN (SPRUCE) IS ABOUT 1/10 OF A MILLIMETER LONG.

however, and in some of these we hoped to find sediments that had been undisturbed since they first settled to the bottom. In Lake of the Clouds we found what we were looking for (Fig. 1). A small basin 100 feet below the lake surface holds about 20 feet of sediment that has accumulated there since the lake formed ten or twelve thousand years ago. When we raised a core to the surface, we were delighted to see fine horizontal layering in the soft organic mud. As exposed in our core, these layers looked much like the edge of a deck of playing cards, with an average

of about 50 layers per inch. Here was clear evidence that the sediments had been undisturbed since deposition. Furthermore, the number and thickness of layers was just what we would expect if each layer represented one year's accumulation of mud. A count made later in the lab has confirmed that there are over 9,000 layers in the core—the lower part, which evidently was deposited when conditions in the lake were different, is not layered—and the supposition that they are annual is being checked by radiocarbon dating of sediment from the core.

In this core, then, is a year-by-year record of events in and around the lake—much like the record of tree rings in a stump, but reaching back much farther in time. When we prepare and examine a layer with the microscope, we can identify and count the pollen grains that blew into the lake during that year's accumulation of mud (Fig. 2). With enough patience, we might hope to find year-to-year variations in the amount and kinds of pollen that could tell us something about the annual fluctuations in climate far in the past. Of greater interest at present, however, is the possibility of tracing the effects of forest fires through several generations of trees.

Our study is aided by the presence of fragments of charcoal in the layers. These microscopic bits of charred wood and leaves must have been blown and washed into the lake just as the pollen was, and from changes in their abundance in the layers we expect to determine the frequency of forest fires in the vicinity. When we add to this information data on the pollen frequency in the same layers, we can reconstruct the history of the vegetation, drawing on what we know of the effects of recent fires. The next step will be to repeat the procedure in several other landscape units that have contrasting vegetation. We should then be able to answer questions about the stability of the vegetation and decide whether the present vegetational mosaic is only the result of unique combinations of historical events.

Although man has occupied, enjoyed, and used the forests of the BWCA for probably ten thousand years, it is only in the past century that the fate of the forests—indeed, the whole landscape—has come to lie entirely at the mercy of his numbers and his machines. It is useless to cry that the landscape be left alone, for even man's suppression of catastrophes, such as our efficient prevention of forest fires, causes changes in the vegetation that will be visible for at least one generation of trees. Man undeniably is part of the scene, with power to change it beyond his comprehension. If the qualities of the landscape that we value so highly are to endure to be valued by our descendants, we must increase our understanding of the unhurried lives of the trees, so that we can better predict the effects of our impatient pressures on them. By probing into the unwritten history contained in lakes, we hope to contribute to that goal.



LICHEN COMMUNITY—Figure 2.

Agfachrome by J. Arnold Bolz.

Vegetation Studies in the BWCA

A Brief Report on Plant Communities

Lewis F. Ohmann and Robert R. Ream¹

AN ESSENTIAL PART OF THE PRIMITIVE CHARACTER OF THE BWCA is its plant life. This vegetation is made up of many different kinds of plants growing together in a variety of mixtures at many locations. In order to learn the effects of man, natural disturbances (such as fire, wind, insect and disease attacks), and time on the development and changes in the vegetation of the BWCA, it is essential to break this mosaic down into naturally occurring units which we call plant communities. The information we obtain from these units will be useful in managing this and other wilderness areas to maintain their primitive character and in some cases to provide guides for restoring disturbed areas to their natural condition.

What are these "plant communities?" How did they originate? How do we maintain or restore them?

Our present study dwells on the first question: we want to determine the kinds of plants and the way they occur together to form these plant communities. Dr. M. L. Heinselman (see article and map in this issue) is working on the answer to the second question, and future research, based on these two studies, may help us answer the third question.

Our method of attack on the first question was an inventory of the plant communities of the BWCA. We have arbitrarily divided this inventory into three parts. The first part, an inventory of upland *natural plant communities*^{*} is nearing completion. We thought

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it was important to start with the natural plant communities because these could provide us with a yardstick by which we could assess the influence of modern man on the landscape. Plans are now being formulated for an inventory of upland disturbed plant communities. Inventory of lowland plant communities will be started in the near future. With information on both natural and disturbed plant communities we will be able to determine, in part, requirements for restoration of disturbed communities and maintenance of natural communities.

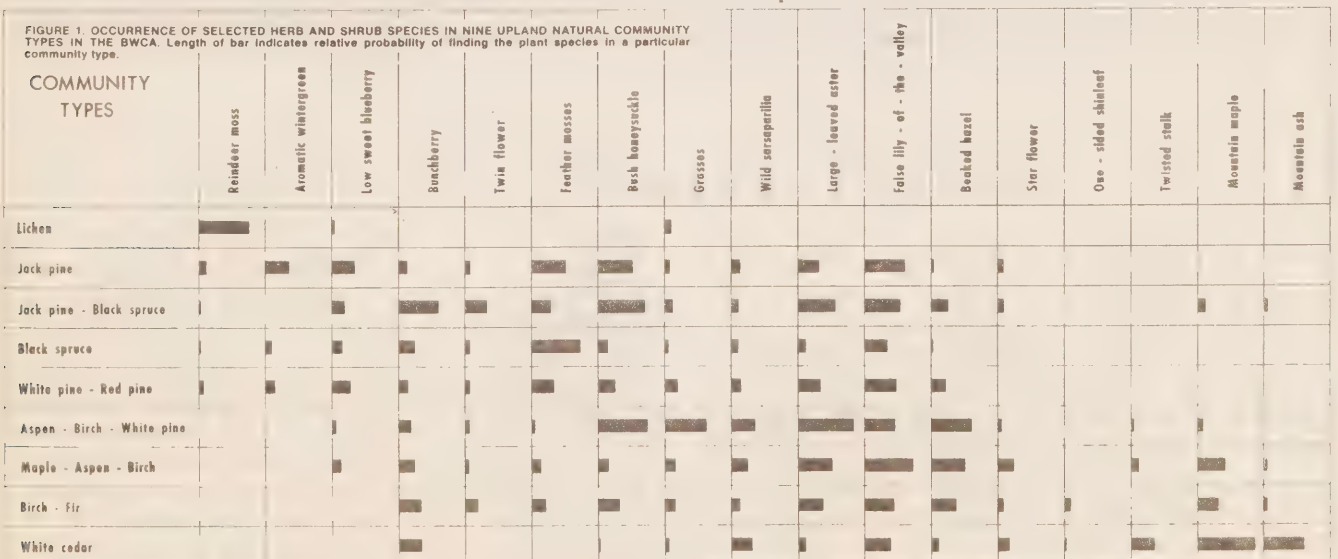
During the past two summers we have collected data on nearly 200 species of trees, shrubs, herbs, mosses, and ferns from 106 upland natural plant community examples.

Using the data collected we have tentatively delimited nine community types by grouping similar vegetation samples together based on the quantities of all species present. Each community type then represents a composite of at least five sampled areas. This study has yielded a great deal of information which will be presented in suitable scientific publications in the near future but we would like to share

with you here a few interesting highlights of our results. In the remainder of this article each of the community types is briefly described and some plants (other than trees) which are important in at least one of the community types are listed. Some of these species are common over a wide range of habitats and others are restricted to just one or two community types (figure 1). For example, if you wished to see Reindeer Moss the most likely place to look would be in a Lichen Community as it is absent or scarce in all other community types.

LICHEN COMMUNITY TYPE (Figure 2)

This type is located on bedrock outcrops along ridges usually scattered throughout the Jack Pine Community. Lichens (Reindeer Mosses) are the dominant plants, but mosses, a few shrubs (such as blueberry, bush honeysuckle, and an occasional juneberry), and herbs (such as rock-harlequin, grasses, and sedges) are also present. When canoeists stop and climb up high rock ridges for a vantage point they often see these open, lichen covered, bedrock outcrops.



*Natural Plant Communities are groupings of native species, resulting primarily from environmental factors present in the ecosystem prior to settlement (and potentially still effective, including such factors as windstorms, insect and disease outbreaks, and fire), or from gradual successional change. Such communities have never been altered by logging, land clearing, cultivation, heavy campsite use, or similar exploitation by modern man.



JACK PINE COMMUNITY TYPE – Figure 3.

JACK PINE, JACK PINE-BLACK SPRUCE, AND BLACK SPRUCE COMMUNITY TYPES

These three types are similar in many ways. The Jack Pine Community (figure 3) is often found on ridges where much bedrock is exposed and soils are shallow and sandy. The Jack Pine-Black Spruce Community type (figure 4) often occurs on deeper, finer-textured soils, but in areas where there are many large boulders near the surface. The Black Spruce Community type (figure 5) differs primarily in having more black spruce and in the presence of a lush blanket of feather mosses covering the ground. There is a gradient within these three communities from almost pure jack pine in the Jack Pine Community to almost pure black spruce in the Black Spruce Community. Shrubs are common in the first two types but rare in the Black Spruce Community. Some typical shrubs of these communities are blueberry and aromatic wintergreen (teaberry) which is especially common in the Jack Pine Community. Two herbs, bunchberry, and twinflower, occur in all of these communities, but are more common in the Jack Pine-Black Spruce Community. All three of these communities originated from the past fires that have played an important role in the history of the BWCA. The principal trees in all three of these communities have persistent cones that open with heat. They seed in heavily shortly following a fire that has left an especially suitable seedbed for germination. Lacking fire, however, jack pine is less

adapted to the type of seedbed common within these communities than such species as balsam fir, white spruce, and paper birch. As a result when jack pines die and leave an opening in the canopy they are replaced by other tree species. So, in time these three community types may convert to Fir-Birch Communities unless fire or some other disturbance occurs while there are still jack pine or black spruce trees remaining as a seed source. This process is as follows for the Jack Pine Community. Jack pine is a very important tree at the present time along with black spruce based on the average number of trees per acre – trees greater than four inches in diameter at breast height (d.b.h.) (figure 6a). In the understory sapling class (one to four inches d.b.h.) jack pine is much reduced in numbers and the individuals present are mostly the same age as individuals in the tree class but have been suppressed in growth for one reason or another. Balsam fir and paper birch are important in the understory (figure 6b). In the seedling size class (all tree stems under one inch d.b.h.) jack pine is totally lacking. The high amount of red maple shown here (figure 6c) is due primarily to the fact that red maple produces a great deal of seed that germinates but most of these seedlings die by the end of the first growing season.

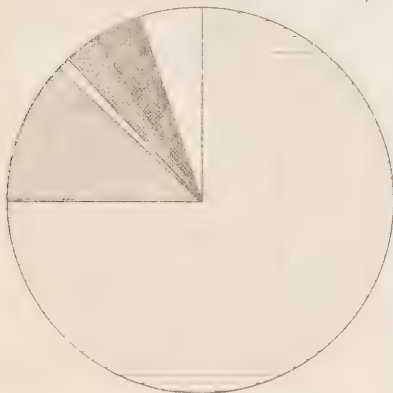
Within the three size classes there is a consistently high amount of balsam fir, paper birch, and a lesser but consistent amount of white spruce. These will be the principal tree species of the community in time.



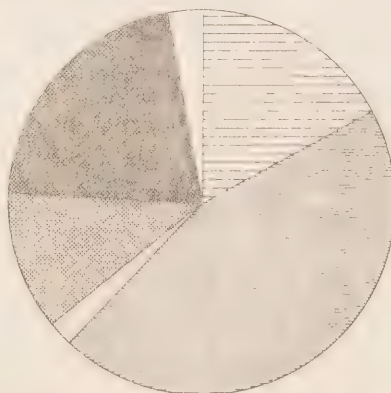
JACK PINE – BLACK SPRUCE COMMUNITY TYPE – Figure 4.

PERCENT OF TREE STEMS BY SPECIES AND SIZE – Figure 6.

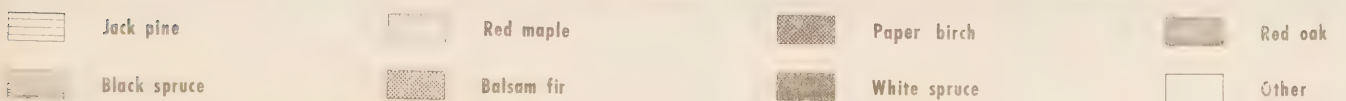
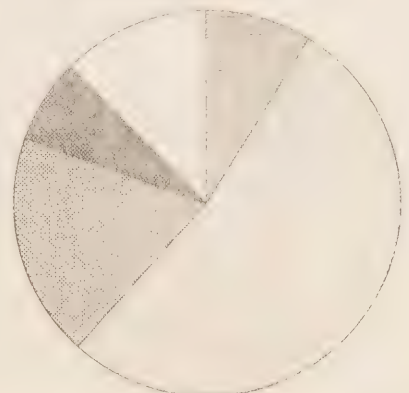
6a. Tree Size Class

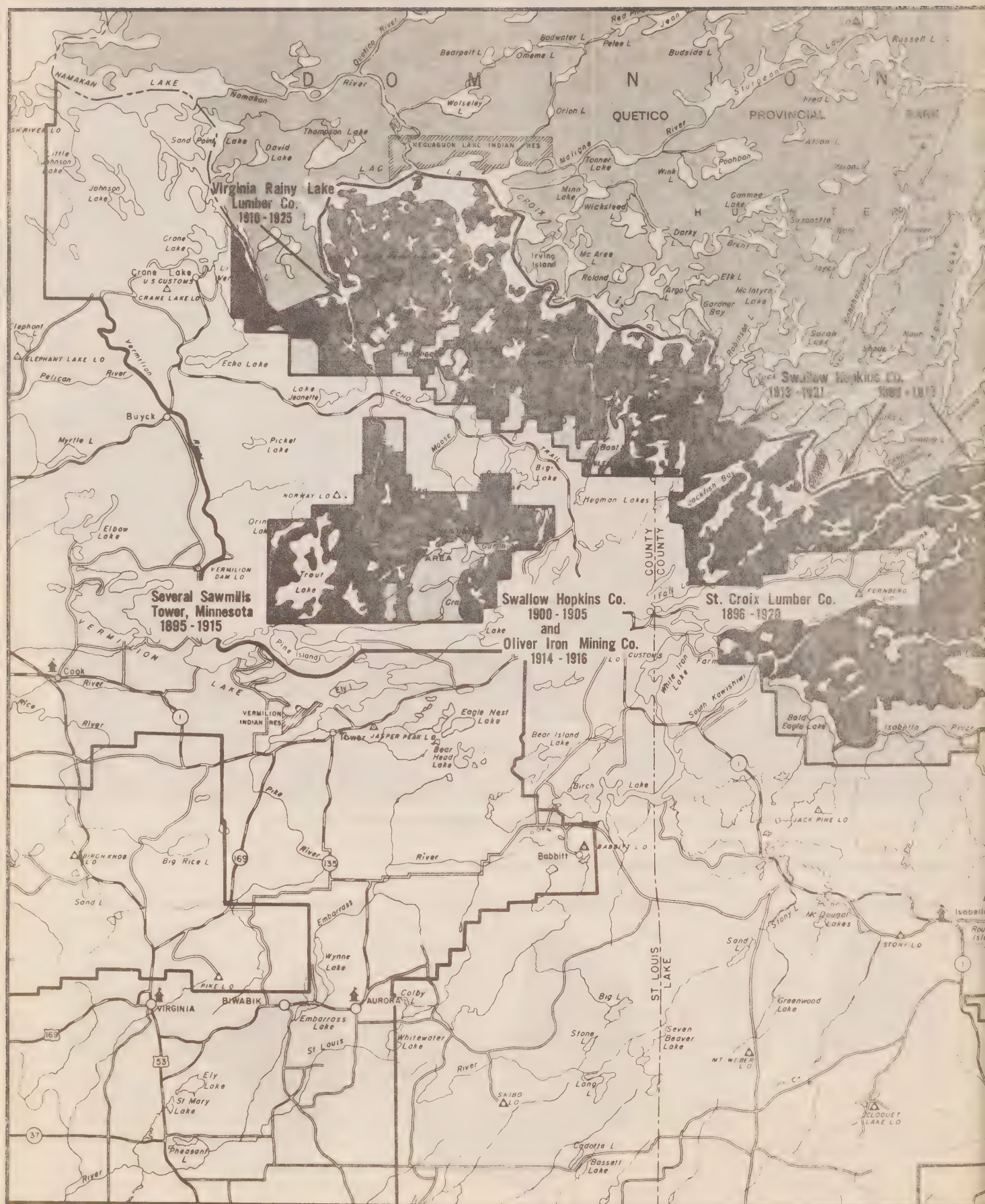


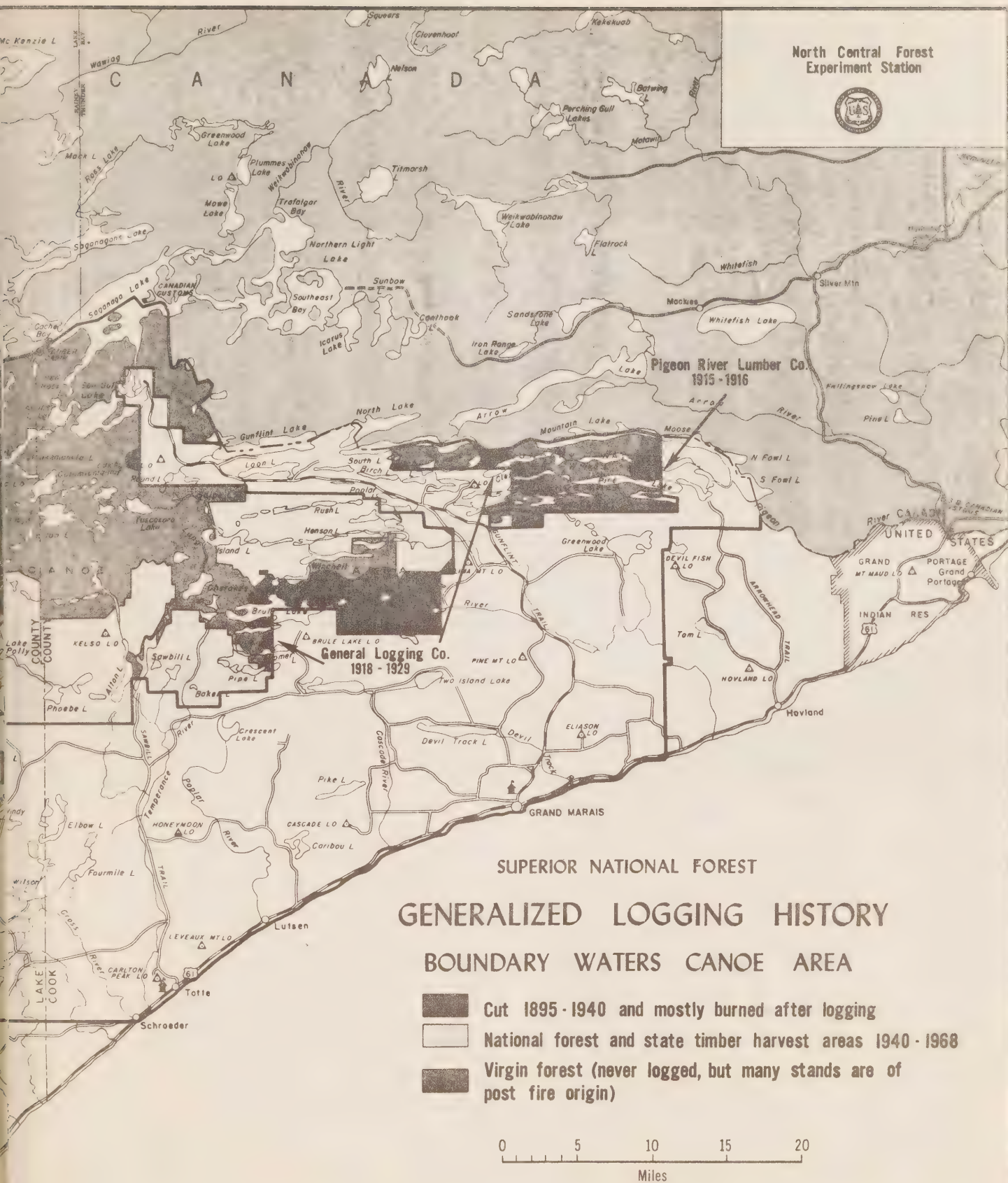
6b. Sapling Size Class



6c. Seedling Size Class







1969

Data Compiled by M. L. Heinzelman.



WHITE PINE-RED PINE COMMUNITY TYPE—Figure 7

**WHITE PINE-RED PINE COMMUNITY TYPE
(Figure 7)**

The favorite camping site of many BWCA visitors, this is the community most often thought of as "virgin forest." It is no longer extensive in the BWCA and is perhaps best represented on many of the islands of Lake Saganaga, some parts of Lac La Croix (particularly the Lady Boot Bay area), the Echo Trail area, and some very old (300 years or more), deteriorating stands along Winchell, Gaskin, and Horseshoe Lakes. Much of what we have said about the three previous community types applies to this community; it also requires periodic disturbance to promote rejuvenation. Common shrubs of this community are blueberry, and wintergreen. Less common are raspberry and rose.

Feather mosses are abundant in this community, and lichens, false lily-of-the-valley, large-leaved aster, and grasses are readily seen. The forest floor is generally open and carpeted with a thick mat of needles.

**ASPEN-BIRCH-WHITE PINE TYPE (Figure 8)
AND THE MAPLE-ASPEN-BIRCH TYPE (Figure 9)**

These two community types are composed primarily of broad-leaved tree species rather than needle-leaved conifer species. These communities are found on a variety of topographic conditions throughout the BWCA but frequently are on deeper finer-textured soils of small valleys. Trembling aspen, paper birch, and red maple are prominent. These communities often have a dense, brushy understory composed of beaked hazel, green alder, and fly honeysuckle. Another shrub particularly common in the Maple-Aspen-Birch Community is mountain maple. These two communities usually also have a lush herb growth in which broad-leaved aster, star-flower, wild sarsaparilla, and grasses are conspicuous. The dense shrub cover is an excellent source of food for deer and moose and they can often be observed in these communities, particularly in the Mesaba Lake area.

**ASPEN - BIRCH - WHITE
PINE COMMUNITY TYPE
— Figure 8**



**MAPLE - ASPEN - BIRCH
COMMUNITY TYPE —
Figure 9**





FIR-BIRCH COMMUNITY TYPE – Figure 10



WHITE CEDAR COMMUNITY TYPE – Figure 11

FIR-BIRCH COMMUNITY (Figure 10)

Many stands of this community type have been recently disturbed by the spruce budworm which feeds on balsam fir. Although most of the fir has been killed in many stands, there are a good many balsam fir seedlings and in time these disturbed Fir-Birch stands (if not disturbed in some other way) will again become vigorous examples of the Fir-Birch Community. In the meantime, the budworm-disturbed stands are probably providing excellent habitat for wildlife because of the lush growth of herbs and shrubs produced in the absence of a tree canopy. Deer and moose can be frequently observed here. This community is widespread and is considered by many to be the "climax" community of this region. It does appear to be the community that is best able to reproduce itself in the absence of disturbance. Where this community type is undisturbed by the budworm and the trees are numerous a dense tree cover results. Under these conditions there is not sufficient light to produce many shrubs and herbs. But if the tree cover is not dense, mountain maple, beaked hazel, green alder, and bush

honeysuckle are abundant. Herb growth is typical of boreal forests with bunchberry, twinflower, feather mosses, large-leaved aster, star-flower, and one-sided shinleaf common.

WHITE CEDAR COMMUNITY (Figure 11)

White cedar is normally a tree of swamp areas. However, canoeists will often see white cedar along the fringes of lakes (often exhibiting a deer browse line). The community type does occur, however, on the uplands as a limited but significant type, particularly toward the eastern end of the BWCA. The community is heavily dominated by white cedar, but may also contain balsam fir and paper birch. An important shrub in many stands of this community is mountain maple. We have found a significant amount of Canadian yew, a species no longer common in the BWCA, in some stands of this community. It is the only community where mountain ash is consistently prominent in the understory. Typical herbs present are twisted-stalk, wild sarsaparilla, bunchberry, and false lily-of-the-valley.



FEATHER MOSSES IN THE BLACK SPRUCE COMMUNITY – Figure 5. See page 22.

Agfachrome by J. Arnold Bolz.



A Second Progress Report . . .

Continuing Timber Wolf Studies

L. David Mech and L. D. Frenzel, Jr.¹

A PROGRESS REPORT of a study of timber wolf and white-tailed deer interactions in Northeastern Minnesota was presented by the authors in the Spring 1967 *Naturalist*, a special issue dedicated to "Perpetuating Wildness." Since that time, field work has continued on this study during the summers and winters of 1967 and 1968. Moreover, dimensions of these investigations have been broadened with regard to field techniques and research approach to include radio-telemetry studies of the wolf. This article is intended to serve as a further progress report on the various aspects of these studies.

The area in which these investigations have been conducted consists of approximately sixty townships in the Superior National Forest, with a considerable portion included within the Boundary Waters Canoe

Area. This expanse of land and water with a variety of vegetation types characteristic of a boreal hardwoods-conifer forest is the habitat of the largest population of timber wolves in North America south of Canada and Alaska.

Field efforts have been directed principally in three phases of study: 1) the biology of predation of wolves on deer, with specific reference to the age structure and condition of a representative sample of wolf-killed deer, 2) the general food habits of wolves as indicated by the droppings (scats) of these animals, with the determination of the role of fawns, moose and beaver in the wolf's diet as a principal objective, and 3) the social organization, travel routes, and movements of wolves in relation to their basic biology and hunting behavior. These three categories of the

research will be discussed separately. The data on deer age determination must be considered tentative, for the jaw specimens must yet be subjected to a more advanced aging procedure for verification.

AGE STRUCTURE OF WOLF-KILLED DEER

As of February 1969, a total of 93 lower jaws of deer killed by wolves have been collected, and a similar number of femur bones inspected. The jaws were examined to determine age on the basis of tooth replacement and wear, while examination of femur marrow indicated the nutritional condition of the animal. Materials collected were from deer killed by wolves in winter, primarily on lakes, shorelines, or inland clearings.

The same patterns of predation have remained evident as were found in the smaller jaw sample of wolf-killed deer reported on in 1967: Of the adult deer, 59% were 4½ years old or older; fawns made up 16% of the total sample but this figure may be too low because of the more complete consumption of fawn carcasses by wolves.

This pattern of wolf predation on deer seems to be of biological importance since we can assume that for a normal age-structured population this 59% was removed from the age classes with the fewest members in the population. To test this idea, we tried to obtain a representative sample of the deer population in the wild for a comparison of the age structure with that of the wolf-killed deer.

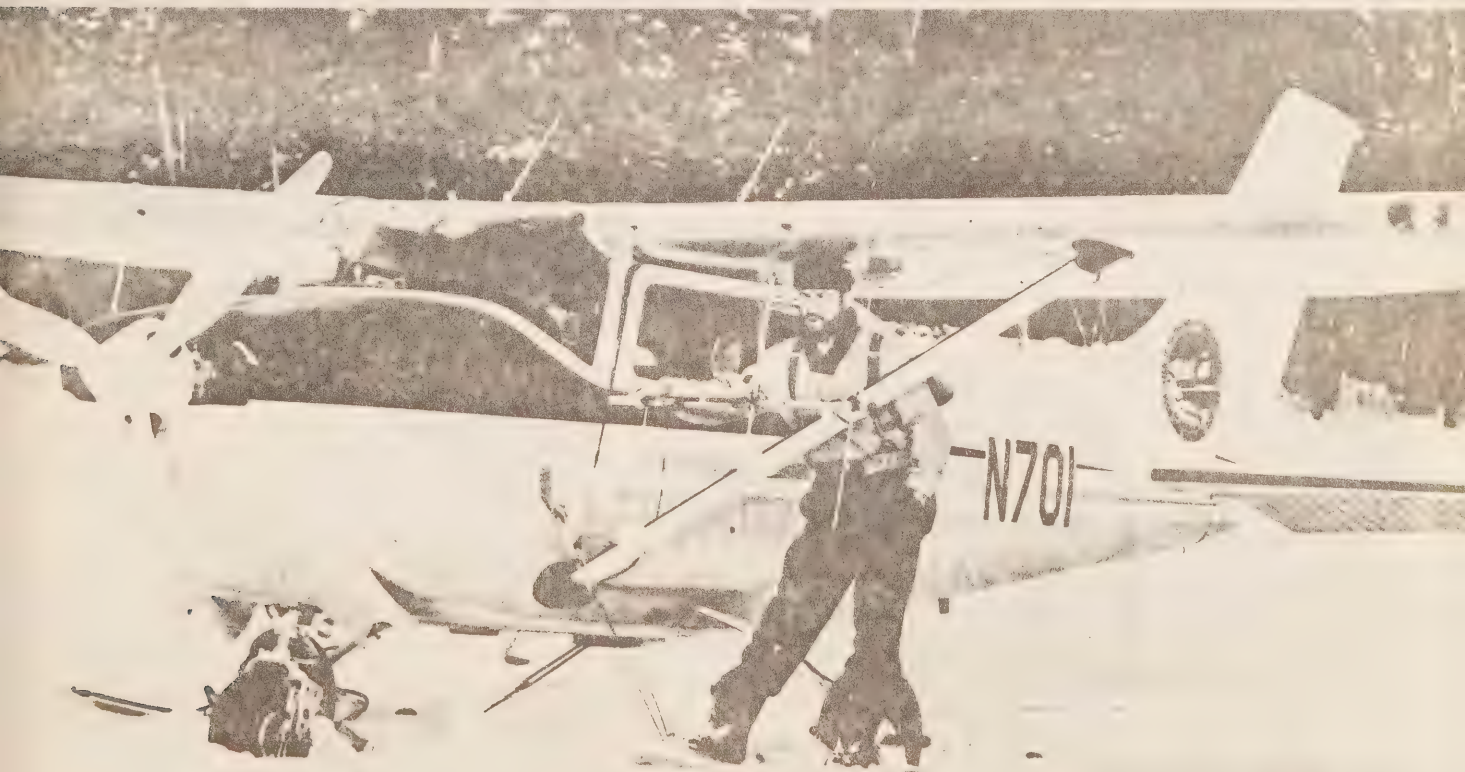
Therefore, samples of deer harvested by hunters

from the general study area during the 1967 and 1968 hunting seasons were examined and ages determined. We assumed that there was no significant selectivity by hunters and essentially no behavior of deer that would cause a particular age class of deer to be harvested proportionally more than others. Each year's sample approached 200 animals and was considered large enough to represent the age structure of the deer population on the study area.

In both samples, the age distribution was that which would be expected for a normal population, i.e., there was a greater number of young animals as compared with older animals, with the numbers in each age class generally decreasing with age. A decided drop-off of numbers occurred between the 3½ and 4½ year age groups, with only 20% of the adult animals being 4½ years old or older. Compared with the 59% of the adult deer in this age group killed by wolves, this becomes a quantitative documentation that wolf predation on adult deer in Northeastern Minnesota during winter is concentrated on the older animals that numberwise are the least available.

WOLF FOOD HABITS STUDIES

One indirect method of gaining information about the food habits of a carnivore is that of examining an adequate sample of fecal droppings from the animals. Identification of scat content and estimation of quantity of each item of diet for a given period provide useful data in food-habits studies. These methods are



A U.S. BUREAU OF SPORT FISHERIES AND WILDLIFE PLANE WITH A DIRECTIONAL ANTENNA IS USED TO TRACK RADIO-TAGGED WOLVES.

Photo by L. D. Frenzel.



WINTER IN THE WOLF COUNTRY.

Agfachrome by J. Arnold Bolz.



DAVID MECH RESTRAINING A TRAPPED WOLF.

Photo by Richard Shank.

being used to determine certain food habits of wolves on the study area, particularly in the incidence of fawns, beavers, and moose in the wolf's diet and the time of fawn consumption relative to the fawning period.

Systematic collections of wolf scats have been made from specific trails and remote logging roads in the study area. In 1967 approximately 360 scats were collected, representing winter as well as summer periods. One hundred and twenty droppings were collected in the spring and summer of 1968 after these trails and roads were cleared of wolf scats early in the spring.

At this writing, in early February 1969, we have information from 180 "wolf-days," each wolf-day including a location for any marked wolf (or any pack-mate with him) on one day. Five wolves located on one day would be five wolf-days.

So far we have been impressed by the great degree of variation in the behavior of our wolves. Take 1051 for example. A week after he was released he left the area and moved 17 miles straight-line distance. This took him to the vicinity of a highway, and in the next few weeks he traveled over an area roughly 15 miles by 2, more or less along the highway. During that phase of his movements he was chased by a group of

loggers with axes, and was almost shot by a local trapper. Fortunately the trapper had been asked to spare this particular wolf, and with his sights trained dead on the animal he suddenly spotted the radio-collar and decided not to shoot.

In his next move, 1051 was not so fortunate. He returned to the general area of his capture and was "bumped" a couple of times on woods roads by drivers more interested in dead wolves than in factual information about the species. Nevertheless, 1051 recovered from his bruises and within a week was walking without a limp. After a few more weeks in that area, he suddenly moved to a location 8 miles in the opposite direction from his first major journey.

A pack of three wolves including one of the marked animals that we have followed for two weeks has surprised us so far by remaining in an area of only about 30 square miles. But any time we may find that they suddenly leave the country.

Extreme variation can also be seen in the rate of kill of deer by our marked wolves. No. 1051 apparently did not take a deer for some two weeks after his release. Then he made a kill and spent a week feeding on it. All we could find of the deer after he left was blood, hair and the lower jaw. After 1051 covered much more ground, he eventually killed three and possibly four other deer over a period of a month.



WOLF PACK ON A WILDERNESS LAKE

Photos by L. D. Frenzel.

INSTRUMENTING TIMBER WOLF WITH RADIO



Another of our wolves, however, killed only one, or possible two, deer during the same period.

Because of this variation caused, no doubt, by such changing factors as snow and ice conditions and the availability and vulnerability of deer, it will require much more work before we can estimate the rate of kill by the average wolf or pack in Minnesota. More individuals and packs will need to be radio-tagged, and they will have to be followed for long periods during which conditions vary greatly.

Naturally we hope to be able to expand the study and to obtain this and other important pieces of information. Eventually, when we learn the extent of the average home range of various-sized wolf packs, and the degree of overlap among them, this will go a long ways toward allowing an accurate estimate to be made of the wolf population in the Boundary Waters Canoe Area.

By knowing the number of wolves present and their rate of predation upon the deer herd in that area, we can begin to learn the way in which the wolf, the deer, and the vegetation of the BWCA interact. It may well turn out that wolf numbers are greatly dependent on the type of vegetation present in their area. In this respect it is most encouraging to know that there will be such a wealth of solid information about the vegetation of the BWCA as is reported on in the remainder of this issue.

Analyses of these scats is based on an identification of the hair found in them. (Generally a wolf scat contains only one kind of hair, although infrequently two types may be present). Techniques include both gross and microscopic examinations, the latter involving impressions made from individual hairs, following a technique described by V.H.H. Williamson and modified by A. Adorjan. (Appreciation is expressed to the latter worker for helpful suggestions made in connection with these studies.) Differentiation by direct viewing of hairs is often difficult. The microscopic impressions, on the other hand, reveal distinctive scale patterns on the hairs, which facilitates identification of the species consumed. By such procedures, even distinctions between adult and fawn deer can be made. This aspect of the study is the subject of an Honors Thesis of a Macalester College biology major.

RADIO-TRACKING STUDIES

During our early investigations of wolf-killed deer, several additional questions about wolf biology kept occurring to us. How many deer are being killed by each wolf pack? How large an area does each pack cover in its travels? Do pack ranges overlap? We knew how these questions and several others could be answered if funds ever became available.

Thus when the U.S. Bureau of Sports Fisheries

and Wildlife and the North Central Forest Experiment Station informed us that they would be able to help support our studies, we decided to expand into this new area of research. The key to answering our questions involved a new ecological technique—radio-telemetry. With this method, animals are “tagged” with miniature radios which emit signals that can be received from a distance, revealing the location of the animals.

We outfitted our first wolf, number 1051, with a radio-transmitter collar on November 27, 1968. He had been caught in a steel trap by two toes. To apply the radio-collar, we injected drugs into the wolf, anesthetizing him, and then bolted the ends of the collar together; a strong covering of acrylic was then applied over the joint, making the entire collar solid, water-proof and hopefully wolf-proof.

Since that time, 1051's signal has faithfully divulged his location each time we have sought it. In addition, four other wolves are now wearing radio collars of different frequencies. We subdued the last animal without drugs, effecting some kind of physiological or psychological “shock” by merely pinning her down with a forked stick. Even after she was released, she lay unconscious for one and one-half hours. Then she suddenly jumped up and ran off.

Almost all of the tracking is done from an aircraft. Mounted on one wing is a directional antenna connected inside to a special radio receiver. From an altitude of 1,500 feet we can receive signals at a range of ten to fifteen miles; and by a series of appropriate aerial maneuvers, we can move in ever closer to the sources of the signals. Eventually we are able to tell when the aircraft is passing over a marked animal. Then we look down and scan the snow below. Usually we spot our quarry and make notes on the animal's location and behaviour, and whether or not the creature is at a kill.

We also record the number of days that our wolves spend feeding on each deer, plus the amount of time they spend between kills. When they abandon the remains, we try to journey into the area from the ground to examine them. Sooner or later we expect to witness some actual hunts and perhaps a few kills. Then we might be able to determine factors that enable wolves to kill certain deer but not others.

²In 1967 financial support for the study was derived largely from grants from the Macalester College Faculty Research Fund and the New York Zoological Society. This was complimented by splendid cooperation and assistance from U.S. Forest Service personnel on the Superior National Forest and from the Minnesota Department of Conservation. Current work is funded by a grant from Macalester and from monies allocated by the U.S. Bureau of Sports Fisheries and Wildlife for work with endangered species. This latter agency, together with significant assistance from the North Central Forest Experiment Station of the U.S. Forest Service, has made the radio-telemetry work this year, and the continuing Macalester-College-sponsored studies of wolf-deer relations, a reality. Student cooperation and assistance, plus the help of many persons living in the Ely area have also contributed to this work.



Wilderness-like Recreation Opportunities Adjacent to the Boundary Waters Canoe Area

David W. Lime¹

RECREATIONAL OPPORTUNITIES IN THE SUPERIOR NATIONAL FOREST are many and highly diversified. Perhaps best known are the wilderness canoe-camping opportunities of the Boundary Waters Canoe Area (BWCA). Here, the visitor can find an experience of complete solitude by penetrating the portage-linked lakes and streams of the Nation's only water oriented Wilderness Area. Some of us, however, neither desire nor need a strict wilderness experience to fulfill our leisure-time needs. No doubt for many of us the BWCA is not suited to either our interests or abilities. Some intermediate form of "wilderness" that is more accessible may be more to our liking. Moreover, time restrictions might also prohibit an extended trip into the Canoe Country. Fortunately, numerous wilderness-like recreation opportunities exist outside the BWCA in the remainder of the Superior National Forest.

The North Central Forest Experiment Station is analyzing recreation demand and visitors' evaluation of the wilderness-type environment of northeast Minnesota. For the past two summers (1967 and 1968), my research has focused on the auto campgrounds of the Superior National Forest. The study concerned itself with determining why campers came to the Forest and what environmental factors affected their decision to choose one auto campground over another.

During the peak of the family camping season (the latter part of July and August 1968), 248 auto campers were interviewed at 31 of the then 33 auto campgrounds in the Forest. Sixty-six percent of these campers came from Minnesota, and 15 percent from Illinois; 85 percent of all campers were on extended vacations. The average vacationer stayed about one week. Most campers had some previous experience

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in northeast Minnesota: Sixty-seven percent of the parties had been in the area before, and half of these had previously camped in the Superior National Forest.

"Why did you select northeast Minnesota and the Superior National Forest in particular for your camp-

ing trip?" campers were asked. Forty-nine different reasons were given—an average of three per party.

Fishing appeared to be the major attraction of the area, with wilderness second (table 1). However, it is apparent that numerous aspects of the natural environment combine to form a sought-for atmosphere.

Table 1. Response to "Why did you select northeast Minnesota and the Superior Natl. Forest for your Camping Trip?"

REASONS	RESPONDENTS (TOTAL — 248) ¹	
	NUMBER	PERCENT
Fishing	154	62
Wilderness	103	42
Quiet, peaceful, uncrowded area	54	22
Scenery	53	21
Water-based activities (excluding fishing)	37	15
Getting away from city, routine, etc.	37	15
Camping in a National Forest	35	14
See Lake Superior	27	11
Relatively close to home	25	10
Land-based activities (berry picking, hiking, driving, rock hounding)	24	10
Presence of many lakes/streams	24	10
New part of U.S.A. to visit	23	9
Visit friends in area	23	9
To see wildlife	19	8
Other aspects of natural environment:		
Vegetation	12	5
Weather	19	8
Topography	6	2
Other activities:		
Visiting BWCA	17	7
Visiting Canada	10	4
Visiting iron mines	2	1
All other	4	2

¹ Many respondents gave more than one reason.



ROCK OUTCROPS IN THE LAKE JEANETTE CAMPGROUND ARE TYPICAL OF MANY CAMPGROUNDS.



AUTHOR INTERVIEWING CAMPERS.

**Table 2. SUPERIOR NATIONAL FOREST AUTOCAMPGROUNDS
NOT ON ACCESS POINTS INTO THE BWCA**

CAMPGROUND	LOCATION ON MAP ¹	ACCESSIBILITY				FACILITIES ²							CAMPGROUND LAYOUT		NATURAL ENVIRONMENT			
		Miles to Duluth	Miles to a Paved Road	Miles to General Store	Watercraft Rental On Lake	Camp Units	Trailer Units	Drinking ³ Water	Sand Beach	Boat Launching Ramp	Nature Trail	Picnic Ground	Overnight ⁴ Fee	Distance Between ⁵ Camp Units	Camp Units With View ⁶ of Waterbody	Lake or ⁷ River	Kind of ⁶ Fish	Type of ⁶ Trees
Big Rice Lake	83	6				3	3			X					0	L	B	
Birch Lake	92	5	14	X		38	38	HP		X			X	118	11	L	E	M
Cadotte Lake	51	15	25			27	27	HP	X	X				108	10	L	E	H
Cascade River	119	6	16			3	3	R						100	3	R	A	C
Crescent Lake	102	24	14	X		40	26	L		X				146	22	L	C	M
Devil Track	115	3	12	X		18	18	HP						140	14	L	D	M
Dumbell Lake	81	4	4	X		5	2	HP		X				87	5	L	E	M
Echo Lake	130	1	1	X		29	29	HP		X		X	X	97	0	L	D	H
Fenske Lake	107	0	13	X		16	9	L	X	X	X	X	X	118	9	L	G	M
Hogback Lake	91	14	14			5	5	L						70	5	L	A	M
Iron Lake	140	4	6			6	6	HP						192	4	L	C	M
Isabella River	82	0	5			11	11	HP			X	X	X	117	10	R	A	C
Kimball Lake	115	1	12	X		9	9	HP		X			X	102	7	L	A	M
Lake Jeanette	134	13	13			9	9	L		X	X		X	117	8	L	C	C
McDougal Lake	77	3	11			21	17	HP	X	X			X	90	8	L	C	H
Ninemile Lake	101	13	14	X		19	19	HP		X			X	109	13	L	C	C
Ox-Bow	96	5	5			3	3	R						300	2	R	A	M
Pfeiffer Lake	85	2				21	21	HP	X	X	X	X	X			L	F	
Poplar River	100	10	10			4	4	R						84	3	R	A	C
Stony Point	86	13	14	X		5	3	L		X				101	5	L	E	M
Temperance River	101	11	11			9	9	R					X	86	4	R	A	C
Two Island Lake	130	4	14	X		36	36	HP		X			X	102	8	L	F	M
Whiteface Reservoir	61	10	16	X		57	52	HP	X	X	X	X	X	107	9	L	E	M

¹All data as of 1969.

²All have pit toilets.

³HP — Hand Pump; Use Lake (L) or River (R) water at own risk.

⁴Overnight Fee: \$1 per night or Golden Eagle Passport.

⁵Average distance in feet.

⁶Number of camp units with distinct view of waterbody.

⁷L — Lake; R — River.

⁸A — Stream Trout; B — Northern Pike; C — Walleye, Northern Pike; D — Walleye, Northern Pike, Panfish; E — Walleye, Northern Pike, Bass, Panfish; F — Walleye, Northern Pike, Bass; G — Northern Pike, Bass, Panfish.

⁹C — Conifers; H — Hardwoods; M — Mixed.

^{*}Two auto campgrounds which were open in 1968, and where interviews were conducted, have been closed to overnight camping.

Although many people mentioned certain activities as the reason for choosing the area, they apparently desired to do these things in a specific environment. For example, 63 percent of those noting fishing as an attraction also mentioned one of the following three things as important in attracting them to northeast Minnesota: (1) wilderness, (2) quiet, peaceful, uncrowded environment or (3) scenery. The attraction of this area, then, is not a single factor but a combination of related factors.

Other interesting facts were revealed from personal interviews with campers.

Some auto campers who stayed in campgrounds located on access points into the BWCA found their way into the Canoe Country with no apparent motivation to be there at all. Many of these same campers felt that they had entered "the wilderness" some distance "back down the road" before reaching the administrative boundary of the BWCA, and that being on an access point was not important to them in selecting that particular auto campground versus some other one in the Forest. Indications were that many of those parties who reached the boundary of the BWCA would have been well satisfied with primitive settings located in portions of the Forest farther from the Canoe Country. In fact, numerous campers in auto campgrounds not on BWCA access points had been in the Canoe Country in the past but also look to other areas of the Forest for a high-quality camping experience. There were also many auto campers who were not familiar with many of the recreation opportunities throughout the Superior National Forest, and who were anxious to gain additional information regarding the resources around them. I found, for example, that the average camper knew about only six of the 33 auto campgrounds in the Forest.

It is important that a wide range of recreation opportunities be available to prospective visitors within a general area. Also, visitors should be well informed about the alternatives available if they are to select those resources that best satisfy their needs. Are *you* familiar with these recreation possibilities?

The total area of the Forest is approximately 3 million acres. More than two-thirds of this area lies outside the BWCA. The water resource is a prime recreation attribute of northeast Minnesota and that portion of the forest adjacent to the Canoe Country is richly endowed with lakes and streams; there are 961 lakes larger than 10 acres totaling nearly 150,000 acres of water.

Many of these lakes are accessible for recreation use. The U.S. Forest Service, for example, maintains 43 developed boat launching sites (see map). There are more than 150 public access points scattered throughout the Forest, and many more water bodies are accessible by trails and primitive roads. In addition many of the Forest's secondary gravel roads pass close to lakes and streams that rarely are explored by visitors. As an added attraction, many of these lakes have been stocked with stream trout by the Minnesota Department of Conservation (see Minnesota Department of Conservation, "A Guide to Lakes Managed for Stream Trout," Division of Game and Fish, 1967).

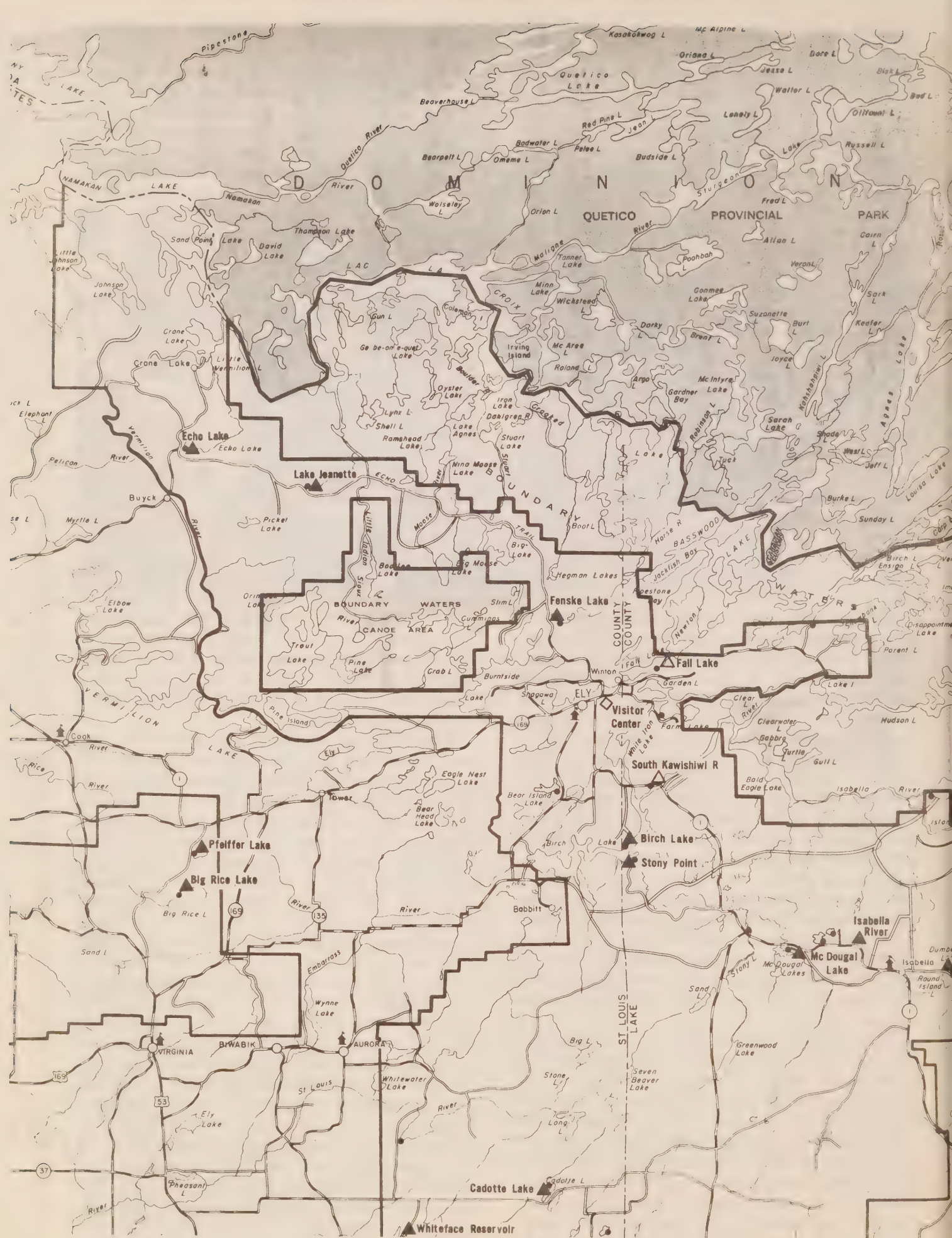
The presence of many water bodies close to roads affords an adventuresome soul with a canoe or small boat an opportunity to investigate several lakes in a short time. The potential also exists for short canoe trips in this part of the Forest. There is a good canoe route in the east-central portion northwest of Tofte. On this route more than 7 lakes (including Whitefish, Elbow, Timber, Frear, and others) are accessible by maintained portages. To date this route has received only meager use. Numerous other opportunities exist for visiting several lakes from one access point. It is ironic that many of these lakes and streams are much more accessible than most of the water bodies in the BWCA, yet often they are used much less than those in parts of the Canoe Country. The opportunity for obtaining primitive travel and camping in many of these settings is therefore real indeed.

The road system of the Superior National Forest allows the visitor to view the many moods of the forest environment. The large, colored recreation map, distributed free by the Forest Service, shows approximately 1,600 miles of forest roads throughout the area. Only 240 miles of this total are paved—notably State Route 1 between Illgen City and Ely, U.S. Route 61 adjacent to Lake Superior, the Gunflint Trail north of Grand Marais, the Fernberg Road east of Ely, and Lake County Route 2 north of Two Harbors. The remaining 1,350 miles of gravel roads provide excellent sightseeing. The most extensive tract of forest land void of asphalt lies east of State Route 1 and extends more than 65 miles to the Gunflint Trail (see map). In addition many natural and historic points of interest are scattered about the Forest. And to satisfy other tastes, blueberries and red raspberries are usually plentiful in late summer.

Numerous opportunities for hikes and nature walks exist. Leisurely walks along primitive roads and trails are appealing to many visitors. Forest trails, about one mile in length, adjoin several Forest Service auto campgrounds. For the more ambitious hiker, extended excursions also are possible. Hikes to Carlton Peak (affording a view of Lake Superior) and Eagle Mountain (highest point in Minnesota, 2,301 feet) are among the more popular challenges (see map). Still others who are willing to "rough it," hike rocky stream banks and travel cross-country to seldom-explored "places."

As of 1969 there are 31 auto campgrounds scattered throughout the Forest (see map).² Twenty-three of these are not on access points into the BWCA. Because of their general remoteness from major travel routes and lack of modern development, they make excellent sites for camping in a primitive setting. Personal interviews with campers resulted in the classification of these 23 sites according to features considered when selecting a campground (table 2).

No attempt is made here to discourage use of the Boundary Waters Canoe Area for those who are seeking a more rigorous experience and relatively more solitude. It is suggested, however, that there are many other places in the Superior National Forest where the potential exists for a nearly comparable recreation experience.





ISLANDS IN A WATER WILDERNESS

Agfachrome by J. Arnold Bolz.



ONE OF THE PRIMARY ATTRACTIONS of the Boundary Waters Canoe Area of the Superior National Forest is the great abundance of almost pristine waters. The preservation of this excellent water is foremost in the minds of the managers of the area. To lose such a magnificent asset would be tragic.

Why is the BWCA so blessed with pristine lakes? The Boundary Waters Canoe Area is located on the southern edge of the Canadian Shield. Relatively shallow soils overlying igneous bedrock are typical of this region. A short growing season is characteristic and a typical ground water is lacking. The majority of the lakes were formed: a) along fault lines, b) in valleys that were scoured out by the glaciers, or c) as a result of damming caused by localized glacial deposition or uplift of bedrock materials.

There are many processes that cause all lakes to evolve from clear bodies of water into dry land. The life cycle of a lake usually begins with a deep, clear, blue-green body of water that is virtually free of aquatic life. As the lake becomes increasingly fertile the aquatic life becomes increasingly abundant. This life ultimately fills in the lake basin and plants typical of marshy areas become established on what was once a body of water. Eventually, the marsh plants are replaced by plants adapted to drier sites.

The increase in fertility in lakes uninfluenced by man is the result of natural processes occurring on the watershed. The decomposition of vegetation, the leaching of certain nutrients from the soils, the dissolving of elements from rock, and deposition of nutrients imported by wildlife are all contributing processes. Furthermore, leguminous plants are able to fix nitrogen and thus contribute nitrogen to the

waters. In many areas, contributions from the atmosphere in precipitation and dry fallout are significant. However, in the Boundary Waters Canoe Area nitrogen is the only element received in measurable amounts from the atmosphere.

This evolution does not proceed at the same rate in all lakes. The glaciers retreated from this area approximately 9,000 years ago leaving all parts of it covered with lakes. Despite this common date of origin, today one encounters lakes in all stages of evolution. Lakes such as Kekekabic, Gabigichigami, and Knife are still, after all these years, deep, clear lakes. Light penetrates thirty to forty feet and more in these lakes. Other lakes such as Moose, Basswood, and Lac La Croix are further along the evolutionary cycle. The many wild rice lakes of the area are lakes which are nearing the end of the "wet" period. If one leaves the water and takes to his feet, he does not have to travel very far before he can stand on a ridge and look across a marshy area that was previously a lake. Most of the visitors to the Boundary Waters Canoe Area visit the infertile lakes such as Knife Lake and slightly more fertile lakes such as Basswood Lake. Indeed, the majority of the larger lakes in the BWCA are of these types. Inputs of nutrient material in these lakes causes a much more noticeable response than a similar input to more fertile waters.

Aquatic plants require essentially the same nutrients as their terrestrial counterparts. In natural water, nitrogen and phosphorous are the major ions. Other elements are necessary, just as they are for all plants. Iron, cobalt, calcium, potassium, sodium, manganese, magnesium, certain vitamins, and a myriad of other substances are known to be required. The

Waters of the Canoe Country

Michael A. Barton

In the 1950's Assistant Regional Forester Harold A. Svenson became concerned about potential pollution problems of the lakes of the Boundary Waters Canoe Area. With completion of future recreation use projections for the Superior National Forest, Mr. Svenson found it even more necessary that basic water quality investigations be done in the BWCA. As a result, in 1966 the watershed management unit of the Superior National Forest was established with responsibility for guidance in water resource management, but with primary emphasis in water quality. In 1967 field investigations were begun and a water quality monitoring system was established. Ever since, initial characterization of the waters of the BWCA is continuing.

role played by all of these elements is not yet understood and there are probably other requirements not yet discovered. Of the two most important—phosphorous and nitrogen—phosphorous is the element limiting growth in the vast majority of the lakes of the Boundary Waters Canoe Area.

It was mentioned previously that an identical input of these nutrients would produce different responses in different lakes. What are some of the factors that influence the utilization of these nutrients? The length of the growing season influences algal production through the amount of solar radiation available for photosynthesis and heating of waters. The orientation and shape of the lake influence wind action and amount of solar radiation. The depth of the basin influences nutrient availability in the water. The shape of the basin influences the amount of shallow water. (Thus, the steep bottom slopes characteristic of the fault line lakes and glacial scoured valley lakes have a much smaller portion of shallow waters. Indeed, the more fertile lakes in the BWCA are generally lakes formed by natural dams.) The amount of inflow and outflow influences circulation of nutrients, water temperature, and retention time of a lake. The amount of organic matter dissolved in the lake is important because of certain physical and chemical reactions that occur.

The factors influencing the amount of nutrients derived from natural sources are equally complex. The larger the soil mass on the watershed the more nutrient delivered to the water. Thus, deeper soils and larger watershed areas contribute greater amounts. The type of soil influences the nature of the chemical elements delivered to the water. The climate influences

the length of growing season, which determines the amount and type of vegetation and, thus, the nutrients derived from vegetation. Climate determines the amount of precipitation available for leaching and transporting nutrients. The type of bedrock is important. Igneous rock dissolves much less readily than other types. (Therefore, less nutrient is contributed from the bedrock of the BWCA because of its igneous nature.) The slope of the ground surrounding the lake influences the rate and amount of nutrients delivered.

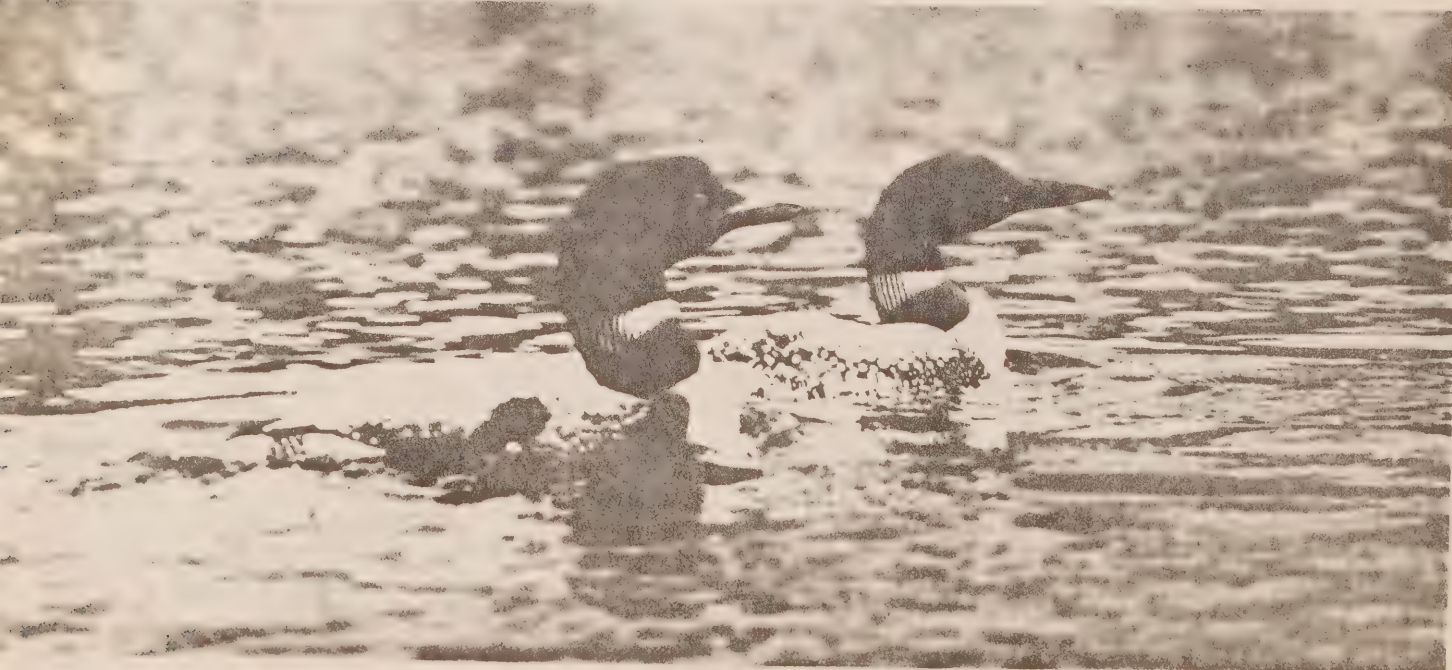
The primary problem of water quality in the Boundary Waters Canoe Area is not of toxic chemicals or gross biochemical oxygen demands. It is the problem of increasing fertilization. The development of undesirable aquatic nuisance conditions, consisting primarily of algae, is the result of fertile waters. Furthermore, long before actual nuisance conditions develop undesirable aesthetic changes are caused in the transparency, color, and temperature of the water by increasing fertility levels.

It is obvious that resource managers have little control over nutrient inputs from natural sources. Minimizing the nutrient inputs from artificial (man-caused) sources is the proper goal. Artificial sources concerning the Boundary Waters Canoe Area may be divided into two types. The first type consists of nutrients internal to the area such as sanitary waste from visitors, solid waste, and certain nutrient elements contained in materials imported to the area. The second type is nutrients originating from external sources such as enriched waters draining into the BWCA from municipal sewage systems and peripheral recreational developments.

The amount of nutrients delivered from artificial sources within the Boundary Waters Canoe Area

LOONS

Photo by J. Arnold Bolz.





depends on the number of visitors. The Forest Service estimates that these visitors imported in 1967, excluding inputs from solid waste and outboard engines, eight tons of sodium chloride, one ton of phosphate, and 12 tons of nitrogen. Further, the Forest Service expects in 1969 to have 360,000 pounds of solid waste in the form of non-burnable refuse brought into the area. This solid waste contributes some major ions as well as substantial quantities of trace elements.

The distribution of use within the Boundary Waters Canoe Area compounds the problem. Seventy-six percent of the visitors entered the BWCA through only eight of the 66 entry points in 1967. Furthermore, use of the area is generally limited to the more accessible regions. Thus, the materials are delivered to a relatively small portion of the area.

The Superior National Forest has instigated studies and taken action to control artificial nutrient inputs from visitors to the BWCA. Preliminary investigations are underway to evaluate the use of combustion toilets, "flying honeywagons", and other methods of sanitary waste disposal suited for a wilderness environment. The Forest Service is attempting to educate the public in the use of soaps instead of detergent and carrying out solid wastes as a means of reducing the contribution of nutrients from these internal sources.

Nutrients delivered to the BWCA from external and artificial sources consist of waters draining into the area enriched from municipal sewage systems and waste from Forest Service campgrounds and private developments located on the periphery. The Superior National Forest is currently updating sanitary systems as funds are made available. Systems that were models a few years ago are now considered inadequate and are being replaced by methods such as spray irrigation. Municipalities involved are awaiting advances in technology that will enable installation of tertiary treatment plants that are economically feasible. Meanwhile, the Forest Service is studying interim measures that could be utilized to alleviate the problem.

However, it should be kept in mind that the ultimate solution in the BWCA, as well as throughout the country, is one of determining which watersheds are to be protected and which to be used for nutrient disposal. The waste from tertiary treatment plants requires disposal; also, the protection of the water by the currently popular method of spray irrigation merely buys time. The amount of time is determined by proximity of the system to water and the rate of the various hydrological, biological, geological, and chemical processes occurring in the watershed.

The discussion has centered on nutrient problems. However, visitors to the area contribute to the overall chemical budget in other ways. The use of outboard motors by the recreationist, in the areas of the BWCA where motors are permitted, can eventually be detrimental to water quality. The use of leaded gasolines can result in lead accumulations in bottom muds which interrupt decomposition cycles and disturb the food

chain. Recent studies have demonstrated that as much as four gallons of gasoline out of ten may be discharged into the water from outboard motors. The oil as well as the lead contained in this gasoline can create problems. One gram of oil requires 3.3 grams of oxygen for complete oxidation and creates unsightly slicks that interfere with other physical processes. The phosphates and other chemicals contained in the oil are often undesirable. The Superior National Forest is attempting to educate the public in the use of unleaded gasoline and nondetergent oils.

The need for a device to monitor changes in water quality and evaluate the effectiveness of control mechanisms led the Superior National Forest in 1966 to develop a water quality monitoring system. The monitoring system consists of a period in which the water is characterized on the basis of chemical, biological, bacteriological, physical, and aesthetic properties. Following this period of initial characterization, selected parameters are measured that indicate abrupt man-caused changes. These parameters include nitrogen, phosphorous, chlorides, coliform, transparency, and primary productivity. Finally, at selected intervals, total characterization will again be accomplished to detect gradual changes in water quality.

Sampling points have been established at 51 locations in the BWCA. These stations were selected to represent areas of little visitor use, heavy visitor use, downstream location from external nutrient sources, and discharge from the area. Volume of flow measurements are made to determine total chemical discharge rather than just concentration.

The establishment of the Kawishiwi Barometer Watershed demonstrates the concern for the impact of Forest Service management upon the total water resource, not just quality. Data are being gathered to characterize the inputs to the watershed from precipitation, output from the watershed as streamflow and evapotranspiration, and storage within the watershed in lakes and soil. Construction of a mathematical model based on these data will enable computer simulation of various management tools and evaluation of these tools without any changes in the actual watershed.

At this time there remains open to us the possibility of preserving the generally excellent quality of the waters of the BWCA. Prevention is much more likely to succeed *than correction at a later date* and is much less costly. Further, corrective measures can only alleviate the grosser aspects of the problem and will, in all probability, never restore to the water its original quality.

Cooperation of visitors and managers coupled with continuing and increasing support is necessary if the useful life of the water resources of the Boundary Waters Canoe Area of the Superior National Forest is to be prolonged. Natural change cannot be prevented but the impact of mankind can be minimized through wise use and judicious management.





WILDERNESS ARTISTRY

Agfachrome by J. Arnold Bolz.

THE BOUNDARY WATERS CANOE AREA is unique for its incredible maze of sparkling lakes and streams. Within its rocky fastness occur the last sizeable remnants of the *Old Northwoods* of the Lake States. We who cherish the Canoe Country visualize the perpetuation of its alluring qualities for future Americans. We see in Wilderness Ecological Research the way toward maintaining, and where necessary restoring, the wild qualities of this landscape by natural means.

Clayton S. Rudd

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whose keen power of observation and gifted hand in black and white or color illustration brought the beauty of the Canoe Country to those who have not visited it and enlivened the memories of those who have



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M. L. Heinselman

ON SEPTEMBER 3, 1964, President Johnson signed Public Law 88-577—the long-debated Wilderness Act—legislation opposed by many in our profession. Now the year of decision is upon us. Shall we reject the wilderness and parks concept and thereby forfeit a valuable professional role? Or shall we put our energies to the task the American people have set for us, and demonstrate that foresters are competent to manage any forested lands, whatever the owner's objectives? I, for one, recommend the latter. It is my purpose here to discuss and to suggest approaches to a type of vegetation management still virtually untouched by any profession. I recognize the complexity of the subject, and the divergence of opinions among interested foresters and biologists. My hope is that this paper may lead to a clearer recognition of the problem, and to fruitful consideration of alternatives. I realize that "people problems" involving sanitation, campsite wear and user conflicts need attention too, but this paper deals only with vegetation management.

Wilderness Values and Objectives

To clearly visualize the job before us we must understand the objectives for which our wilderness system will be managed. The definition of wilderness in the Wilderness Act reads: "A wilderness, in contrast with those areas where

Abstract.—The Wilderness Act and long-standing national park objectives require a new and positive approach to preserving natural landscapes. The objective should be maintenance, or where necessary, restoration of natural forest communities. Natural agencies and naturalistic approaches must and can be used. Commercial logging is incompatible, but our old "hands off" policies, which oddly have included the exclusion of wildfires, will not usually accomplish desired ends either. New programs including resource inventories, wilderness research, and active vegetation manipulation are suggested. Regulated fires are envisioned as a major tool for initiating new successions. Our profession must promptly embrace these new objectives and programs or the opportunity will pass to other professions.

man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean . . . an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation. . . ."

The National Park Service Act of 1916, states (in part) that the purpose of these parks ". . . is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." In elaborating on this theme the Leopold Commission¹ said ". . . as a primary goal, we would recommend that the biotic associations within each park be maintained, or where necessary recreated, as nearly as possible in the condition that prevailed when the area was first visited by the white men. A national park should represent a vignette of primitive America."

These quotations, and the history of the wilderness and national park movements, show clearly that Congress and the people want our wilderness areas and parks to be places where the natural landscape will exist in perpetuity. We have a mandate to preserve, or where necessary to recreate, the primitive American scene!

If we are to sense our mission we must also understand the reasons and sentiments behind this public purpose. This we should be able to do, for most of us were drawn to the profession by a love for the land. Perhaps the major social purposes these areas will serve can be grouped into these three classes:

1. *The spiritual and psychological.*—The aim is to provide places of solitude where contacts with the natural world may give mankind a continuing perspective on his true place in the scheme of things. In the end this may become the most vital need for wilderness.

2. *The recreational and aesthetic.*—The aim is to provide sanctuaries from the complexities of civilization where man's ancient roles can be lived again, where primitive and unconfined recreation will remain possible in the space age, and where aesthetic appreciation of the natural scene is truly possible.

3. *The scientific.*—The purpose here is to assure mankind that some "islands of the natural world" will persist into the space age to serve as check areas against which land management can be measured, to provide a reservoir of wild plant and animal genes, and to serve other scientific purposes still dimly seen.

From the viewpoint of forestry one outstanding point emerges from

this discussion: the goals of the entire wilderness program center around maintaining the natural landscape—especially its biotic communities. This is the goal we must accept, knowing full well that it cannot be achieved easily. This objective falls in our area of competence. In short, we are needed!

And yet, this is the goal on which so many of us hesitate. We say that wilderness people put forth this goal in ignorance of the biological problems. We hold that natural forests cannot be maintained in the face of civilization. We say that logging will be necessary. And we say that multiple-use managed forests would serve these purposes just as well.

Certainly many wilderness supporters do lack the biological background to understand some of the implications of their desires. This is expected for these people come from all walks of life. But some of the strongest advocates of wilderness come from the biological sciences themselves, and even from the forestry profession. These people know what they want, and they believe their goals are attainable. They know that managed forests also require much effort and research, and may even be harder to maintain than natural forests. Even the nonbiologists in the wilderness movement sense this conflict. And we lose the faith of honest supporters of wilderness when we reject the concept of natural communities—for this strikes at the very heart of the movement!

Many of us seem to fear that our programs of multiple-use managed forests will be jeopardized if we allow the park and wilderness philosophy to persist. Our *opposition* to park and wilderness projects

¹Leopold, A. Starker, S. A. Cain, I. N. Gabrielson, C. M. Cottam, and T. L. Kimball. Wildlife management in the National Parks. (Report to the Secretary of the Interior on biotic management in the National Parks.) *The Living Wilderness* 83:11-19. 1963.

may very well have this consequence, but our *support* would surely help the cause of managed forests. The very people that support wilderness and park projects also readily see the value to society of a fine system of managed multiple-use forests. These people are not enemies of forestry—they are conservationists in the fullest sense of the word. When they understand our programs and trust our motives they will support good forestry on managed forests just as firmly as they support wilderness. It is only when we reject their strongest values that they turn against us and wonder if we have motives other than those we proclaim.

Before going farther, it should be made clear that I too am an earnest supporter of multiple-use forestry for the majority of our nation's forest lands. And I think intensive forestry with high priority for timber production will be necessary on large areas of both public and private timber holdings. I also believe a managed forest can be a thing of beauty, and a place that will serve a large proportion of our outdoor recreation needs. But managed forests cannot be equated with wilderness. If there are roads, stumps, machines, and forests molded by the hand of man in pursuit of his commercial interests, the wilderness is gone.

Extent and Complexity of the Problem

In terms of both area and ecological diversity our wilderness and park programs constitute a significant forestry problem. The national forest wilderness system already embraces some 9 million acres designated by the Wilderness Act. Certainly there will also be additions from the primitive areas during the 10-year review prescribed by Congress. Perhaps two-thirds of this national forest wilderness carries some forest cover, although something less than this might be considered commercial forest. The national parks contain 14 million acres, and the national monuments 9 million acres. Within these there exists an unknown acreage of primitive forested lands that will certainly continue to be managed as wilderness. As a guess, this may

be near 10 million acres. In addition, the national wildlife refuges and ranges contain some 29 million acres of wildlands subject to study for inclusion in the wilderness system. A good deal of this is forested, but much of it will not meet wilderness standards. Thus our federally-owned wilderness system may shortly include something in excess of 30 million acres of forested lands. Much of this land is subalpine, semiarid, or otherwise low in productivity. But it carries trees and is thus a forestry problem.

In addition, there are substantial state-owned areas where the principles discussed here may apply. I am thinking of Adirondack State Park in New York, Baxter Park in Maine, certain redwood parks in California, the Porcupine Mountains in Michigan, etc. Some of the larger federal, state, and private natural areas may need professional attention too. The nation's total wilderness and natural areas system thus may include 40 million acres of forested lands—possibly more. While this is less than 2 percent of the area of the United States, it still is an area worthy of the attention of many professional land managers.

The range of natural communities encompassed by this system is staggering. This is to be expected, for a major goal of the wilderness, parks, and natural areas program is to perpetuate samples of as many natural landscapes as possible. In the Rockies we have pioneer communities of lodgepole pine, aspen, and larch, and more stable forests of ponderosa pine, Englemann spruce, subalpine fir, and others. On the West Coast we have Douglas-fir, several pines, true firs, Sitka spruce, hemlock, western redcedar, redwood, sequoia, and still more. In the Lake States and the Northeast we must deal with white pine, red pine, jack pine, aspen, birches, maples, beech, oaks, hemlock, white spruce, red spruce, balsam, and peatlands bearing black spruce, tamarack, and cedar. In the Southeast the areas that might qualify for preservation contain even greater diversity, for they range from the tropical Everglades to the subalpine communities of the Great Smokies. And in Alaska

there are still others. My point is this: There is room in this program for people with training and experience in the silviculture and ecology of nearly the whole gamut of North American forest communities.

Ecological Foundations for Wilderness Administration

To effectively implement the programs that Congress and the people have decided upon we must employ an ecological sophistication unknown in American forestry today. This will require much of the silvical background of commercial forestry, but it will also demand deeper knowledge of the origins and successional processes of forest communities. Administrators need specialists in the forest ecology of their regions.

I say this because I recognize a paradox of the wilderness and parks program—if we are to maintain and restore the natural scene, then we must consciously work at it! The strict “hands-off” policies advocated in the past are not sound. This is so in part because we have already subjected our areas to several forms of “management,” even in the national parks. Past and present “management” includes an increased incidence of forest fires in the nineteenth and early twentieth centuries, and the near exclusion of wildfires in recent decades. These changes in the fire regime have had profound effects. Another management measure has been the manipulation of populations of the large herbivores and their predators—the elk, deer, sheep, antelope, moose, caribou, bear, coyote, wolf, and mountain lion. We have nearly eliminated the predators, leaving their prey without this natural population check. Some areas have even had portions of their forest cover subjected to timber harvest. This ranges from light fuelwood cuts and the logging of valuable individuals to total clearcutting followed by uncontrolled fires, or sometimes followed by regeneration practices. There has also been grazing and over-use of trails and campsites.

These indignities to the natural scene are serious, but they do not preclude action now. Indeed, they

make it more urgent! Fortunately, most potential wilderness areas still contain much of the original flora and fauna. Large areas still hold plant and animal communities that can readily be equated to the primeval landscape.

And fortunately some of the things modern man is responsible for are still "natural" in their effects. For example, fires are an inseparable part of the ecology of many forest communities (lodgepole pine, jack pine, aspen, black spruce, red pine, Douglas-fir, and western larch, to name a few). In presettlement days these fires were lightning fires or fires set by the Indians. But the ecological consequences must have been the same as for the fires set by modern man—as long as they burned standing timber (fires in cutovers were another matter). Thus in many cases it is chiefly the incidence of fires that has changed, and we can still reconstruct the primeval landscape. In general the most significant effect of fires has been the initiation of new forest successions. These pioneer successions have always been an important habitat for wildlife.

Similarly, we must recognize the roles of windstorms, insect and disease outbreaks, landslides, avalanches, and other "catastrophes." These agents have decimated both old and young forests since time immemorial. We must understand and usually accept their consequences in wilderness areas. Again their normal effect is the initiation of new successions.

The concept of the "virgin" forest is confusing. Some apparently, would apply this term only to very old natural communities that have not been burned or ravaged by insects or diseases. But few of the forests that most people actually call virgin could thus qualify, for most are the products of fire, storm, insects, or disease—often in relatively modern times. A better criterion is that such forests be the products of natural agents as opposed to forests resulting from logging or other commercial activities, or from deliberate planting or seeding by man. This distinction should be clear to foresters, and we must help wilderness people adopt such a criterion also.

All of the foregoing recognizes the dynamic nature of plant and animal communities, and indeed of whole wilderness ecosystems. There is not just one possible natural landscape for a given wilderness unit, for surely over time there are many. We cannot be too exacting nor too impatient in our standards. Pioneer and early successional forests have their place, and so do the late successional (or "climax") types. One should also expect to see recent burns, blowdowns, insect and disease-ravaged stands, beaver-killed flowages, avalanche tracks, slide areas, and even raw erosion scars at times.

And now I would like to propose some ecological ground rules for wilderness programs. In maintaining and restoring the natural landscape we must employ natural agents to the maximum extent possible. Nothing should be removed from nor added to the ecosystem if possible. Wild game will often be an exception because we must substitute the rifle for vanished predators. But we should not make such an exception for timber harvesting because there is no biological need for such action. The mechanical removal of forest products violates the whole wilderness concept by introducing civilization, and by leaving an obvious and long-lasting unnatural impact on the landscape. Fire, on the other hand, is a natural agent, and it can and should be employed. Exceptions to these rules must be made for areas badly disturbed by past commercial activities. For example, if a large area has been logged and burned it may be necessary to plant or seed if key native trees are to be restored within a reasonable time.

Wilderness Maintenance and Restoration Programs

We are ready now to consider action programs. Their broad objective is clear: It will be to maintain, or where necessary to recreate, the original landscape. This simple objective is actually a staggering requirement. As the Leopold Committee recognized, it cannot be done easily nor completely. Certain elements of our flora and fauna may be permanently lacking. But it can be done in part, and this is all we can ask.

I hesitate to use the word "management" here because its connotation is imprecise, and it may evoke opposition from wilderness supporters who do not understand. But a conscious effort to maintain or restore natural communities is essential because our forests are dynamic systems that have already been subjected to unnatural influences. For the foreseeable future we probably will have to continue to exclude many if not most wildfires (for safety reasons if for no other). And we cannot put our wilderness areas in "cold storage"—it is just not quite that simple. All foresters know that such action would tend to eliminate the pines and other pioneers. Therefore, I repeat, some form of "management" will be necessary in most areas if we are to maintain and restore the primitive scene. From such management I have already excluded commercial operations. I would add that mechanical equipment must be used with great caution, only where essential, only where no permanent scars will result, and only in a manner that will not disturb the users.

For each unit of the wilderness system we shall eventually need a three-step program; (1) the wilderness inventory; (2) research aimed at crucial problems; (3) action programs. Let us consider each briefly.

First, a sound program must be based on knowledge of the present resource, and of the probable primeval condition. Obtaining these data I call the "wilderness inventory." We will concern ourselves here only with the plant segment of the ecosystem, but animal communities require similar inventory if data are lacking.

The inventory of present conditions should include detailed mapping of vegetation types, of forest age classes, and of disturbed areas. The aim is to get a working knowledge of the resource, and to establish benchmarks against which future actions can be judged. Vertical airphoto coverage should be obtained if not available for a recent date. Low oblique airphotos, ground shots, and plot data should be taken for typical communities and for sites with high scenic, inspirational, and scientific values.

An inventory of original conditions will require greater ingenuity. The objective is to get a picture of the primeval landscape to serve as a goal for the action program. Techniques must vary with past history, and with the time since primeval conditions were disturbed. Fortunately, much of our wilderness system is still in a substantially natural condition. For such areas we can document the forest cover on an arbitrary benchmark date by on-site studies of present age classes and species. If disturbance is greater, we may need to examine snags and remnants of old stands to see whether basic changes in the forest cover (other than simple fire successions, etc.) have occurred. Where disturbance is slight and recent, the benchmark date can be recent, or even the present. If it is great and long-standing the date must be as far into the past as records permit. For the latter areas cover analyses must be supplemented with old photos and maps, with reliable accounts of explorers, botanists, and geologists, with land office survey notes, with logging and mining company records, etc. When the inventory is complete a map of the primeval landscape should be made.

Research comes next. Two general areas need emphasis: (1) basic ecology of important or poorly known communities; (2) applied studies designed to utilize ecological knowledge in the manipulation of plant and animal communities. For many areas we surely need research and pilot-scale trials in prescribed burning, which must often be used to duplicate safely the results of prehistoric forest fires. In the South, the Lake States, and elsewhere we already have promising research results that point toward the success of prescribed burning as a tool for wilderness maintenance. We also have a wealth of ecological studies that confirm the role of fires in perpetuating pioneer types in primeval forests. There certainly will be feed-back in both directions between ordinary silvicultural research and these specialized ecological and prescribed burning studies centered around wilderness maintenance. Research is also needed to find techniques for seedling or planting native species in

areas where they have been eliminated by commercial activities.

Action programs should begin as quickly as a sound basis is developed. We need not panic, however. The successional changes that mold forest communities are mostly slow. We can wait 10, 20, or even 50 years in many cases. An old and decadent forest is a "problem" only if we are concerned about commercial values. Forests have grown old and broken up many times in the ages gone by. They are "wasted" only if society places a higher value on their forest products than on their wilderness values. In most regions the early successional stages can still be recreated at a future date if this is the goal we settle upon for given areas.

I envision prescribed burning as the major tool for producing new successions in most wilderness areas. The Leopold Commission reached the same conclusion. Fire is a natural agent, it removes nothing from the ecosystem, it is likely to be cheap, and it can be used without mechanical scarring of the landscape. I think the day will soon be here when it can also be used safely. Public acceptance must be sought. Our campaigns against wildfires have been so successful that we now must "unsell" the false impression that all fires are bad. This will be particularly difficult for the wilderness, where magnificent standing forests must sometimes be allowed to burn, and where some game animals will inevitably be lost.

Even the thought of deliberate fires in standing timber seems beyond most of us. And yet only a few decades ago comparable wildfires were commonplace in most of our wilderness areas. Few people were injured in these fires and no timber of value was "wasted" because such lands are still unharvested. When we are able to choose the times and places of ignition, the direction of the fires' runs, and the times and points at which control is exerted, it should be possible to accomplish much in vegetation maintenance with safety and economy. I am aware that this possibility has rarely been verbalized in print, but we must begin to think about such programs now.

A fire plan aimed at duplicating

the proportion of pioneer types in the primeval landscape would be our guide. Most forest types would not need firing more than once every 100 to 300 years, and some areas would require even less fire, or none at all. Where lightning fires can safely be allowed they should simply be monitored until they reach points where control is required. This, of course, would require advance study and pre-suppression planning. There may even be large areas in certain regions where lightning fires alone will be adequate. Some user-caused fires may also be allowed to burn, but the incidence and location of such fires will often be unsatisfactory. Where unplanned wildfires cannot be left to burn because of safety considerations, threats to commercial forests, or improper location, prescribed burning is our alternative.

Meanwhile, as we await the day that such programs can begin, there is much to be done in restoring natural communities on badly disturbed sites. In many cases seedling and planting techniques are already at hand. All we need to do is acquire truly local seed sources of native species, and properly select the sites for treatment. In some cases the reintroduction of vanished native plants and animals should be attempted. Use of the axe and saw to remove competing trees when planting or seeding should be avoided if possible, and no roads should be built under any circumstances. Prescribed burning would again be a preferred tool for site preparation.

Our efforts should go mainly toward establishing new natural communities, and rejuvenating old ones. Stand tending during the life of a forest is unacceptable in a wilderness area, save for occasional ground firing to open up forests of ponderosa pine, redwood, red pine, and similar fire-resistant species. Fires of this kind were common in prehistory and could be duplicated today.

We will have some hard choices when insect epidemics and diseases strike. As a general rule these should be allowed to run their course except where adjacent commercial forests are directly threatened. In such cases it may be es-

sential to exert controls within the perimeter of the wilderness. Perhaps a clear policy on these problems must await research findings. At best most present controls are clumsy, of uncertain effectiveness, and often hazardous to other biotic resources. Specific biological controls are badly needed, but some may never be forthcoming.

The Challenge to Our Profession

We have been considering a new field of resource management in this paper. It is still virtually untouched by our profession, and largely in the discussion stage in other fields too. Yet I know that many of us in forestry see in the wilderness movement a negation of many things we stand for. We urge multiple use on all forest lands, and we mean to include commercial logging almost everywhere.

Perhaps this is understandable. Barely sixty years ago we, as a new profession, undertook the seemingly impossible task of developing a system of managed forests out of the chaos of the "cut-out and get-out" era. The specter of a timber famine lay before us. It seemed that we could only hope to reduce its impact. Yet today we are well

along with the job of setting up those managed forests. We still do not have much really intensive forestry, but most land managers are concerned about getting back an acceptable stand of reproduction, and most are having success. Our fire protection programs are very effective. But the wonder of it all is that even these modest measures have given us some timber surpluses!

Simultaneously, many people in our increasingly urban society see a new value in keeping intact a few samples of our natural forest heritage. They are as concerned about the psychic values of a refuge from civilization, and about the scientific values of the natural world, as we once were about our nation's wood supply. But they need leadership and technical help. They need a profession of scientifically trained land managers—men that can bring to reality their desires to maintain the natural landscapes in our wilderness areas, national parks, and national wildlife lands. They are looking toward our profession. And they are struck with dismay! For many of us reject their values, and tell them their goals are impossible. We say they demand too much land for these purposes.

But perhaps it is *we* who are demanding too much! Can we rightfully expect to practice commercial wood production on nearly all forest lands? Could the nation use all this wood—especially if we shift to more intensive forestry? I suspect that in truth we can meet our nation's timber requirements on less land than is now devoted (often haphazardly) to this purpose. And we know that much of our wilderness and park land is not on our best and most accessible sites.

I also say that the goals these wilderness people put forth are valid goals. And we are the logical profession to rise to their challenge! If we refuse their pleas, history may pass us by. I say this because I think that some professional group is going to rise to this challenge. It will be a profession that accepts the premise that not all forest lands must produce timber for commerce—a profession that can sense values in a landscape that transcends the stumpage value of the trees growing upon it. It will be a profession that is willing to accept society's conclusion that a few examples of the natural world are worth the effort required to maintain them. I hope it will be our profession!

PRESERVING NATURE

IN FORESTED WILDERNESS AREAS AND NATIONAL PARKS

Miron L. Heinselman

PRESERVING NATURE

The inspirational, scientific, and educational values of our national parks and wilderness areas depend heavily on our success in "preserving nature." But the natural forest ecosystems of some of our most cherished areas are presently endangered by subtle ecological changes, primarily because we have failed to consider the dynamic character of primeval ecosystems, and because "protection" programs frequently exclude the very factors that produce natural plant and animal communities. We have assumed that preservation is assured by prohibiting logging, grazing, mining, agriculture, hunting, or trapping, and by protecting the forests from fire, insects, and disease. Sometimes it is, where a climax ecosystem exists. But as we learn more about the life histories of plants and animals and the intricate interactions among environmental factors and plant and animal communities, we see more and more broken links in natural ecosystems.

Natural forest communities exhibit a remarkable adjustment to local geology, soils, topography, and climate. Each plant species occurs on soils to which it is adapted, and within altitudinal and latitudinal zones that meet its temperature and moisture needs. Many forests also exhibit a "layered" structure, with certain species occupying the upper canopy, while others form an understory. Plant species adjust to one another in competing for moisture, nutrients, heat, and light. Yet seldom does a single forest community permanently possess any given site.

Forests are born of change, and they die through change as well. Plant and animal communities are dynamic—ever-changing, ever-growing, maturing, and dying—to be succeeded by another community adapted to new circumstances.

The concepts of "pioneer" and "late successional" or "climax" communities help in understanding vegetational history. A "pioneer" forest is composed of trees and other plants capable of occupying denuded terrain, such as recent glacial moraines and exposed bedrock, or ground bared by fires, windstorms, avalanches, or erosion. Trees that form pioneer stands are sun-loving and well adapted to growing in the open but often poorly adapted to growing beneath a forest canopy. On the other hand, "climax" species tolerate shade; and as these

trees grow up under the pioneer species, they gradually succeed them.

Pioneers have special adaptations for reproducing on open lands or after forest fires, or other catastrophes. Some have light seeds easily transported by the wind—such as aspens, birches, willows, and certain pines and spruces. Some can sprout from the root collar or from underground stems or roots. Oaks, aspens, birches, many other deciduous trees, and coast redwood possess one or both of these abilities. Only under unusual circumstances does fire destroy the ability of such trees to repopulate burned land quickly.

One of the most fascinating adaptations to fire is the persistent, closed-cone habit of lodgepole pine, jack pine, and certain other conifers. These pioneer trees are killed readily by forest fires—either crown fires or severe ground fires. But their cones are borne high in the crown and remain attached and closed for years, storing huge quantities of viable seed. Fires sweeping through the forest kill the trees and scorch both crowns and cones. But temperatures usually do not reach lethal levels inside the cones, and the resins that seal the cone scales melt. After the fire the cones open and release the seeds, which fall upon ashes and exposed soil, temporarily freed of competing plants. These conditions are ideal for young conifers, and most forests of lodgepole pine, jack pine, and black spruce originated in this manner.

Red (Norway) pine and white pine in the Lake States and the Northeast, and ponderosa pine, sugar pine, larch, western white pine, Douglas fir, and giant sequoia in the West also reproduce following fires, but by a different mechanism. Their thick bark and long, branchless trunks enable them to survive severe ground fires, but they lack the closed-cone habit and shed their seed and drop their cones soon after the cones mature. Furthermore, in several species good seed years occur only at intervals of 2 to 5 years or more. In nature, intermittent ground fires kept down the undergrowth of competing shade-tolerant trees and shrubs and retarded the accumulation of organic matter. Eventually, however, a fire hot enough to kill most of the old trees occurs, setting up conditions for regeneration. The area is partially freed of tree cover; stand-

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ing snags and scattered groves or individual trees provide partial shade; mineral-soil seedbeds are exposed because the humus cover has burned; and competition for nutrients and moisture is greatly reduced. Scattered "veterans" provide seed in good seed years, and the denuded area gradually seeds in to the original species. A new and nearly even-aged forest is formed, perhaps interrupted by groves of unburned or fire-scarred older trees.

In the absence of fires, insect outbreaks, or severe windstorms, most pioneer forests are gradually replaced by shade-tolerant species. This process is known as "succession." We once thought its ultimate product was a regional "climax" vegetation, capable of reproducing itself indefinitely on the same site, without the intervention of major disturbances such as fire or windstorms. This simplistic view of climax no longer is held by most ecologists, because the actual history of forest stands usually is far more complex and often punctuated by intermittent disturbances. Even the shade-tolerant "climax" species are replaced under some circumstances, and the environment itself may change through peat accumulation, climatic shifts, erosion, changes in animal populations, and other events. Some of the trees capable of growing beneath pines and other pioneers are maples; eastern and western hemlock; northern white cedar and western red cedar; red, white, and Englemann spruce; and several true firs. They are characterized by an ability to grow under the conditions associated with deep shade and to become established on thick layers of humus.

As forests grow old, trees gradually die and fall to the ground. The age at which this occurs varies greatly by species, local growing conditions, geographic region, and many chance factors. Generally, however, jack pine, lodgepole pine, and aspen trees are relatively short lived; most do not live more than 100 to 250 years. White pines, red pine, ponderosa pine, Douglas fir, and western larch may live 300 to 500 years or more. And the sequoia, redwood, western hemlock, western red cedar, and some other western conifers may live 800 to several thousand years. These differences in longevity influence stand composition.

Many forests contain mixtures of shade-tolerant trees, some of which reproduce successfully in small openings created by the death of individuals. Forests of this kind tend to develop a many-aged structure if they persist for long periods without serious disturbance by fires, insects, or windstorms. Examples are the hemlock, cedar, spruce, and true fir forests of the Cascades, Olympics, and Coast Range in the Pacific Northwest; the Englemann spruce and subalpine fir forests of the Rockies; the maple, birch, beech, and hemlock forests of the Lake States and the Northeast; and the balsam fir, spruce, and cedar forests of the New England mountains, the Adirondacks, and the northern Lake States.

But even these more stable forests often are ravaged by windstorms or insect epidemics. The spruce budworm, for example, recently has killed most of the balsam fir and much of the white spruce over millions of acres in eastern Canada, New England, and Minnesota. Fortunately, these forests also have a mechanism for replacing themselves. Thousands of tiny balsam seedlings usually are present on the ground, and many are not killed by the budworm. Thus when the budworm has consumed an old forest, the next generation of young firs is waiting to replace it. In the Rockies, vast areas of Englemann spruce sometimes are decimated by bark beetles. This has happened in some of our wilderness areas in the past few decades. But usually enough seed trees escape; and these, together with a few small seedlings not killed by the beetles, initiate a new stand. Insect-ravaged forests such as these may look desolate for a decade or more, but then the new forest appears, and life begins anew as it has for untold generations.

Fires can denude vast areas for long periods if they entirely consume forests of conifers lacking the closed-cone adaptation, or if they reburn young stands before seedbearing age is reached. Lodgepole pine, jack pine, and black spruce begin to bear seed between 10 and 20 years of age, but many conifers begin much later—often age 50 or more. Such reburns are uncommon, however, and usually scattered individuals or groves of mature trees escape. But changes in forest composition are to be expected after such fires, and the rebirth process may take several decades.

In presettlement times fires were caused both by lightning and by the accidental or deliberate firing of forests by the Indians. In fact, early man is thought to have burned the forests of North America in at least some regions for perhaps 10,000 years. But if man failed to ignite a flammable forest, sooner or later lightning produced the same result. This can be inferred from the evolutionary adaptations to fire of many plants (for example, the closed-cone habit of jack pine and lodgepole pine), and from records of ancient charcoal in peat bogs, lake sediments, and glacial deposits.

These fires did *not* destroy the soil nor rob the land of its fertility. In fact, in northern regions and cool mountains the gradual accumulation of needles, leaves, mosses, and rotting wood actually *ties up* essential plant nutrients and covers the soil with such a thick layer of humus that tiny conifer seedlings have difficulty getting established. Fires consume this organic mantle, bare the mineral soil seedbeds, and release the accumulated mineral elements. Thus fires can actually "rejuvenate" a forest by replacing an old, decadent stand with a new, vigorous one. This is precisely what has happened ever since the Ice Age in the famous pineries of the old North Woods; the great sequoia, ponderosa pine, larch, Douglas fir, and lodgepole forests of the West; and throughout the range of jack pine and black spruce in the Lake States and the boreal forests of Canada and Alaska. Fire scars or "catfaces" on old trees testify to this history. And the ages of many of our present forests can be related to the tree-ring records of fire scars on these veterans. Many of the most magnificent conifer forests in our national parks and wilderness areas owe their origin and present composition to these past fires.

Thus the usual concept of a "virgin forest" is misleading. Many people think of virgin forests as only the old and venerable communities of large trees and regard them as permanent legacies from the past that somehow escaped the ravages of fire, insects, and disease. We also require, and rightly so, that these forests never have been logged or cleared by man. Forests resulting from logging, clearing, burning, or similar disturbances are called "second growth" and are considered inferior. But the "virgin forest" must be redefined in the light of modern ecology, because we know now that many of our finest examples are really the products of presettlement fires, windstorms, insect outbreaks, and similar natural disturbances.

A better definition of virgin forest is that it simply be the product of natural processes, as opposed to a forest resulting from disturbances by man. By this definition a virgin forest can be either young or old, composed of large species or small, well-stocked or nearly open, and magnificent or homely. This is a far more ecologically defensible concept, for it admits all truly natural landscapes, whether the forests originated centuries ago or just last year following a fire or insect epidemic. We must then recognize that the "second growth" on a new burn today is to become the "venerable" old forest in our great-grandchildren's time!

Many species of wildlife are adapted to early successional plant communities, whereas others are characteristic of mature forests. Both kinds have a place in wilderness areas today if they were present in the primeval ecosystems. Species characteristic of burns, open areas, shrub communities, and early successional stages include the white-tailed and mule deer, elk, ruffed grouse, sharptailed grouse, hares, foxes, coyotes, bears, beaver, and many more. Some of these animals were more at home on the edges of disturbed areas than in the great open areas; nevertheless, they were associated with new successions. Species that seem to have been more abundant in mature conifer forests include the pine marten, certain squirrels, and several birds. Other species, such as moose,

timber wolf, cougar, and woodland caribou, ranged widely between mature forests and new successional stages and are difficult to classify in this respect.

The implications of the foregoing natural history for wilderness and national park preservation programs are far-reaching. If we are serious about maintaining the natural ecosystems of these areas, then clearly the elemental forces of the past must still prevail. And when we consider past and present resource "protection" policies, we see important deficiencies.

We have "controlled" (mostly *eliminated*) the large carnivores, such as the timber wolf and cougar. Yet they were the only effective predators of the large herbivores—the elk, moose, and deer. Excessive herbivore populations and the consequent overbrowsing, overgrazing, starvation losses, and necessary herd-reduction programs are old stories now.

Until recently we have tried to control forest insect infestations with pesticides, or by felling and burning infested trees. Sometimes we "clean up" wind-damaged forests, and exotic plants have been introduced—even deliberately.

Fire policies have had the most powerful and pervasive effects. We have attempted to control forests fires for 50 years or more; in most areas we are now quite successful. Yet, by so doing we have sometimes accelerated successional changes over vast areas—causing the simultaneous aging of forests over entire landscapes, preventing the establishment of new pioneer plant and animal communities, eliminating the diversity of nature, and excluding the ecological niches of many forms of wildlife. The immediate impact is far greater in certain even-aged and short-lived pioneer forests such as jack pine, lodgepole pine, and aspen than in long-lived forests such as Douglas fir, red pine, ponderosa pine, and sequoia, or in shade-tolerant forests of maple-beech-birch, or spruce and fir. In a sense we are committing our parks and wilderness areas to a grand ecological experiment by inadvertently trying to produce climax forests over vast areas—on a scale that may never have occurred before. We clearly have this situation in the Boundary Waters Canoe Area, in Yellowstone, Grand Teton, and Sequoia-Kings Canyon National Parks, and many other areas.

The consequences of this program are not only unintended, but in most cases unknown, for ecologists can find few examples of such circumstances within comparable ecosystems. This is simply not "the way it was" in primeval nature.

If past policies are not resulting in the preservation of nature, then what *is* an ecologically sound policy? First, we must have clear, specific, and biologically attainable objectives for each area. Policy statements should spell out the philosophy of ecosystem management and the biological nature of the ecosystem to be maintained or restored. Philosophically, the focus should be on restoring the primeval *environment*. What we are interested in is preserving the total *system*—the ever-shifting mosaic of plant and animal communities. We cannot freeze nature into a static mold. But we *must* offset the disturbances caused by modern man.

Our concept of the ecosystem to be preserved or restored should be based on detailed studies of vegetational and faunal history, and on an inventory of present plant and animal communities. Fortunately, forests write their own history in tree rings, and many forests in our parks and wilderness areas still date from the primeval period. Sophisticated methods for reconstructing the primeval scene are available where such tree-ring records can be obtained. Ring counts on old fire-scarred trees can help determine the fire history for hundreds of years. And by obtaining the ages of forest stands over whole watersheds, it is possible to correlate the age structure of

present forests with this fire record. Written records or old photographs and drawings can also help, especially the early U.S. Land Office survey records, explorers' diaries, old newspapers, and similar sources. Preserved pollens, larger plant remains, and charcoal in lake sediments or peat bogs have recorded plant communities over much longer periods. They can be used to connect information about the recent past with the situation hundreds or even thousands of years ago. Indian and early-man archaeological sites are an important source of faunal records. And carbon-14 dating now makes it possible to place firm dates on many organic sediments, fossils, and archaeological finds.

Decisions on ecosystem objectives must be made when this assessment of the primeval ecosystem is complete, and when an inventory of present communities is available. The historical research and the inventory will allow judgments about the degree to which present ecosystems have changed from the primeval. The objectives should spell out the vegetational, faunal, and environmental characteristics to be achieved; but they are not to be viewed as static prescriptions for each landscape unit. They merely should detail such things as the vegetation types and successional stages to be encouraged, the approximate proportions of the area that might be occupied by each type and stage at any one time, the native fauna to be encouraged, and the significant natural environmental factors that may require attention. The proportion of the area to

be occupied by various successional stages is a key decision. If possible, it should be based on virgin-forest age classes or other solid evidence of the frequency of new successions.

Once ecosystem objectives have been set, a strategy to achieve these goals is needed. Unfortunately, strategies are not yet available for many ecosystems, and in such cases the initial focus must be on relevant ecological research and technique development. But the basic general strategy is clear. It will be to replace missing vegetation types or faunal elements and to see that important natural environmental factors are present at approximately their natural frequencies. When these requirements are met, we accept as natural the changes in plant and animal communities that may occur in both place and time. We are not really trying to "manage nature" or "control succession." We must not insist on a given vegetation type or animal community for each site.

Fortunately, in the United States many park and wilderness ecosystems still are close enough to the primeval that drastic changes in flora and fauna will not be needed over much of the area. It is mainly the proportion of successional stages that will require corrective action. In contrast, in much of Europe, the Middle East, and the Far East virtually all primeval ecosystems have been destroyed for so long that the concept of the "natural" ecosystem is hardly relevant.

I can suggest several specific kinds of actions needed to implement this general strategy, some of which already are

Fires eliminate the old forest and expose ash or mineral soil seedbeds.



Magnificent virgin forests like the
Douglas fir forest in Washington
often owe their origin to past fire

endorsed by the National Park Service, the Forest Service, and other agencies managing nature reserves:

1. Reintroduce missing members of the animal communities wherever possible, including both herbivores and carnivores.

2. Restore native vegetation where it has been badly disrupted by past logging, grazing, agriculture, and so on. (Soil preparation, seeding or planting, and mechanical vegetation control may be necessary where changes have been major.)

3. Avoid the introduction of exotic plants, animals, and fish. Eradicate exotics already present where feasible.

4. Allow native insect and plant diseases to reap their toll. Cease the application of all pesticides, herbicides, and similar chemical controls.

5. Do not "clean up" blowdowns, or insect- and disease-killed forest stands.

6. Assure a natural fire regime where fire was a significant environmental factor in the primeval ecosystem, by prescribed-controlled burning if necessary.

Only natural environmental factors should be employed—to the maximum extent feasible. Artificial seeding and planting, soil preparation, and mechanical vegetation control are justified only to offset major disturbances by modern man. Where seeding or planting are used, only local seed courses should be used.

Fire policies and programs need discussion, because fire is such a powerful environmental factor, and because it is one of the few major natural factors over which we exert control. Today, we are greatly reducing the area burned in many nature reserves where fire was once the single most important factor in generating new successions. In such ecosystems we have at least six fire policy options, and a decision cannot be avoided. These options are:

1. Attempt fire exclusion and accept the slow but pervasive changes in plant and animal communities that inevitably follow.

2. Allow "safe" lightning-caused fires to burn; allow also for some other wildfires that cannot be controlled, but extinguish the rest. If this option results in less than the natural fire frequency and burned area, so be it.

3. Allow "safe" lightning fires to burn, allow for some other wildfires that cannot be controlled, but prescribe enough additional controlled fires to assure the natural fire regime.

4. Suppress all wildfires to the extent feasible, and duplicate the natural fire regime with prescribed-controlled fires.

5. Allow all wildfires to burn unchecked unless life or property are directly threatened, and hope that a natural fire regime will result.

6. Abandon the ideal of natural ecosystems, and turn to full-scale vegetation and environmental manipulation by mechanical and chemical means, seeding, planting, and so on. Attempt to produce desired vegetation with the tools of applied forestry.

For most areas I favor either option 3 or 4, depending on the particular fire control, human safety, and property safety considerations of the area. Either option would provide approximately the natural fire regime and would avoid the risk of letting wildfires get out of hand before control is attempted.

The second option, allowing for "safe" lightning fires and some escapes, but not using prescribed fires, may be acceptable where it would yield close to the natural fire regime. In isolated mountain areas this policy may be valid if there is little possibility of fires escaping to lands outside the wilderness or park.

The last option, mechanized forestry, seems to me to be inconsistent with the basic philosophy and objectives of our national parks and wilderness areas. However, it is urged as

the only realistic and practical choice by some foresters and by many of the forest industries, who point out that a commercial harvest of timber could be obtained as a byproduct. Timber cutting is now practiced in parts of the Boundary Waters Canoe Area, in Algonquin and Quetico Provincial Parks in Ontario, and in several other large "parks" in Canada and other countries. But in none of the cases with which I am familiar is there a serious attempt to duplicate primeval vegetation conditions following cutting. Unfortunately, this option, without commercial incentives, will have to be resorted to in some auto campgrounds and other high-use sites.

I reject the fifth option, allowing all wildfires to burn, both because it endangers life and property and because with recreational use the location and frequency of fires would be unnatural. We cannot endanger human lives either inside or outside wilderness areas, and we cannot risk damage to commercial forests or to structures outside.

It is clear also that I do not favor the first option—attempted fire exclusion. This is the present practice in many areas, but the ecological consequences are great and uncertain. A further problem, which we may be facing in many areas already, concerns the accumulation of forest fuels by excluding fire. In cool coniferous forests there is a gradual accumulation of litter and humus on the forest floor, and in severe droughts this organic matter can become a major fuel. Also, as forests mature, the total standing volume of flammable material increases, and often there is more dry, dead wood in old stands. Some forests certainly reached these stages under primeval conditions, and I do not mean to imply that old forests are unnatural. But if we attempt fire exclusion in an ecosystem consisting of maturing, even-aged forests, we may force a totally unnatural preponderance of old stands upon the landscape. If a wildfire does then escape during severe fire weather, the potential for a real conflagration is present. Its ecological consequences may be most unfortunate, to say nothing of safety problems.

I must emphasize that in most areas we are not yet ready to introduce prescribed fires of the kinds required ecologically, or on the scale needed to duplicate the natural regime. Much experimentation will be needed to achieve technical expertise in firing and control methods, in gauging weather and fuel factors, and in understanding the fire prescriptions necessary to achieve the ecological effects of the natural wildfire regime. The size of areas to be burned, the frequency of burning, and the burning techniques are all matters of choice that require research. There is no need—and indeed it may be impossible—to burn every year. One might allow major burns only once every 10 to 20 years. This will depend on the natural fire frequency as well as on burning weather.

There has already been much research in prescribed burning, and many applications are being made. But for ecosystem applications in the virgin wilderness, I am talking about the introduction of severe ground fires or even running crown fires in mature forests. In some cases these fires must be severe enough to kill most or all of the trees within the burn. Of course, only a small percentage of the park or wilderness would be burned at any one time. The aim would be to slowly reestablish the primeval distribution of forest age classes and vegetation stages. We have little relevant experience with prescribed burning to achieve this.

Research to develop the needed expertise in both prescribed burning and fire ecology is now underway adjacent to the Boundary Waters Canoe Area and in Sequoia-Kings Canyon National Parks. These studies are new, and much more work is needed. Meanwhile, as we await the development and acceptance of prescribed burning, ecologists and managers can proceed with inventories of present plant and animal communi-

ties and with historical research to document the primeval ecosystems. Fortunately, we do have some time yet, because most successional changes in vegetation are slow.

Meanwhile, the public must continue to exercise great care with fire in our parks and wilderness areas. Perhaps Smokey Bear has oversold his message; he should be telling us that some fires can help the forest and create new homes for wildlife. But we must leave prescribed burning to the experts and prevent all man-caused wildfires.

Air and water pollution and soil erosion are being suggested as arguments against the use of fire in ecosystem preservation programs. Fire opponents suggest that intolerable smoke would result and that there would be excessive inputs of soil nutrients and sediment into lakes and streams. However, I think these fears are unfounded. First, studies show that forest fire smoke is chemically different from urban or industrial smogs. Such smogs contain large amounts of sulfur and nitrogen oxides, carbon monoxide, ozone, and peroxyacetyl nitrate (PAN). Forest fire smoke contains far less of these injurious compounds. It is composed mainly of carbon dioxide, water vapor, smaller amounts of carbon monoxide, small quantities of olefins and ethylene, and particulate matter. It does add some pollutants, but it simply does not pose the same threats to human health or vegetation. Furthermore, urban and industrial smogs are emitted continuously and in the most densely populated areas. But fires in wilderness would occur only on a few suitable burning days, and then only in years when burning was feasible and needed, and in remote wildlands. The most serious urban smogs occur where the local atmospheric circulation permits accumulation of toxic gases. Fires in wilderness would contribute to these local problems only where a wilderness occurs within the same "airshed," which is not common.

Most mineral elements released in the burning of forests are not lost through runoff. They are recycled back into the plant and animal ecosystem. If this were not so, fires would have depleted the forests of North America long ago. The truth is that many northern conifer forests owe their vigor to this periodic recycling of nutrients—it is part of nature, and it has occurred countless times in the past. Although some past studies have provided data on this question, we are just now really getting the facts. Available studies suggest that there are some nutrient releases to streams following fires, but these releases may be no larger than those accompanying commercial timber harvests. Furthermore, fires in nature do not remove large volumes of nutrient-containing wood, bark, and foliage from the ecosystem as does commercial tree harvesting. And fires in nature or prescribed fires generally would occur on any one watershed only at long intervals.

The popular notion is that massive soil erosion usually follows forest fires. But personal observations over many years in many regions have convinced me that this rarely occurs in natural forests. (A dramatic exception is the chaparral type in Southern California.) On very steep terrain it may occasionally happen for short periods, but even there prompt revegetation of the burns usually stops soil movement within a year or two. On steep slopes, the combination of clear-cutting, careless road construction during logging, and slash-burning after logging may cause serious erosion. (And this is poor

forestry, too!) But these practices should not be equated with the effect of fires in virgin wilderness. Again, if disastrous erosion had followed most fires in nature, the virgin wilderness of North America would not have contained the beautiful conifer forests still present in many fire-dependent ecosystems.

One may ask whether fires in parks and wilderness areas would not deplete atmospheric oxygen. But this argument is invalid, too. A tree will consume just as much oxygen when it dies and decays from causes such as wind breakage, disease, or insects as when it is consumed by fire. The *rates* of oxygen consumption are much different, but the *amounts* are identical. Inasmuch as all trees are mortal, it matters little to the earth's oxygen balance whether trees die gradually in an aging forest or suddenly in a fire that covers a limited region. The new forest on the burned area will be producing a large net output of oxygen within a few seasons, whereas the old climax forest may not produce any more than it consumes.

Regardless of these arguments, one thing is clear. Fire *was* part of the natural environment in many of our most cherished nature reserves. If we are to preserve natural ecosystems, we must allow fire to be part of the system again. And if such natural events in the past produced acceptable conditions, we can expect them to continue to do so in the future.

Today there are still areas of *de facto* wilderness outside designated wilderness areas, national parks, and other nature reserves, especially in the West and Alaska. The ecosystems of some of these areas are still fairly intact. But as our population rises and pressures on the land increase, the designated reserves may become virtually the only lands where relatively complete ecosystems can be maintained.

It is imperative that our major nature reserves be kept large enough to defend as viable ecosystems. They must be large enough so that reintroduction of fire is feasible and so the impacts from commercial forests, cultivated lands, and industrial areas will not impair them. The home ranges of significant animals and birds must be protected adequately—especially the rare or endangered species with large home ranges, such as the timber wolf, cougar, grizzly, caribou, and bald eagle. We have no firm guidelines for minimum ecosystem size. I suspect that they will vary for each area and each problem. But obviously, where the area is too small to protect from serious external impacts, we are in trouble. Problems affecting water levels in Everglades National Park are a case in point.

Preserving nature and managing national parks and wilderness areas will require more research, more time, more money, and more people trained in ecology. We are not talking about preserving a few parks and wilderness areas to be used as giant playgrounds. We are talking about keeping our perspective on human life in relation to the earth's ecosystems. And we even may be talking about the survival of mankind! For if we are to understand the living ecosystems of the earth—the only life in our solar system as far as we know—then we must preserve this natural system.

Have we, in our wisdom, already learned all that our *children* will ever want to know about the structure, functioning, and evolution of the natural world? Is it possible that they may someday need some of the genetic diversity of the plant and animal life that increasingly is confined to our remotest lands and nature reserves?

We part with remnants of the natural world at our peril. The choice is simply a matter of priorities. If we can afford billions to recover a few bits of sterile dust and barren rock from the moon, perhaps we can also afford a realistic and ecologically sound program to preserve the life systems of PLANET EARTH! ■

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Wilderness and National Park Management Goals

Professor Donald P. Duncan's constructive discussion of my paper "Vegetation Management in Wilderness Areas and Primitive Parks" is appreciated.¹ Several questions that merit further comments are raised.

These questions revolve around acceptance of the goal stated by the Leopold Committee on National Parks that "... the biotic associations within each park be maintained, or where necessary recreated, as nearly as possible in the condition that prevailed when the area was first visited by the white man." Dr. Duncan has rightly concluded that I accept this goal, at least in general terms, as a fundamental premise for wilderness and park programs. This is an important philosophical point, and one our profession must weigh carefully before accepting or rejecting.

Dr. Duncan expresses certain reservations about this goal. These center around a felt need to maintain *variety in cover types*, and around the possibility that the psychological, recreational, and aesthetic preferences of visitors might not be served as well by the primeval landscape as by some other combination of cover types created by "management." The latter approach would still rule out commercial logging as an incentive and it might utilize natural environmental factors rather than mechanical means. If I understand Dr. Duncan correctly, he suggests creating by "natural" means certain vegetation combinations that did not exist in prehistoric times, because such a landscape would be more pleasing to the users.

Such a philosophy might be acceptable for many small state parks, but would it secure for mankind those benefits that Congress and the people actually had in mind in the basic enabling legislation for our National Parks and Wilderness Areas? I think not. One sees frequent reference in the legislative history of these programs to the "preservation of nature," to plant and animal communities "untrammeled by man," and to broad social and scientific objectives. Narrower recreational and aesthetic purposes

do not seem paramount. And we see in the wilderness and national park movements such figures as John Muir, Aldo Leopold, Robert Marshall, Olaus Murie, Howard Zahniser, and others with similar views. These leaders were not just "nature lovers," but biologically astute individuals that understood the complexity of plant and animal communities. They believed that mankind must keep a remnant of the natural world before him, because without such areas he would lose a priceless perspective on his place in nature, and restrict scientific opportunities to understand the community of life of which he is a part.

I hesitate to endorse the creation of landscapes that certain users may prefer. Such preferences vary with their backgrounds, the purpose of their visit, their familiarity with the region, and their perception of ecological relationships. I do *not*, however, advocate a rigid adherence to an exact facsimile of the primeval forests on some fixed date in the past. We cannot require that if there were jack pine or lodgepole pine on a *specific acre*, then we must always have these species on that site. This would deny the dynamic nature of communities—one of the very factors I stressed. The scene, to be truly natural, will be a slowly changing kaleidoscope.

As I visualize our job, our mission is to *maintain the ecological integrity* of our Wilderness Areas and National Parks. We must understand all significant communities, and insure the presence of significant natural environmental factors. To accomplish this we must study the forests of past and present in detail. Then we must adopt a yardstick that tells us roughly what proportions of the area were occupied by various communities. Our "management" should merely make certain that the interplay of environmental factors does indeed give us roughly such a landscape.

If we fail to do this, and shift instead to satisfying visitor preferences, then eventually there will be no place on earth where either layman or scientist can know the natural world "untrammeled by man."

The ideal "management" would be none at all, but I am enough of a realist to recognize that if we are to keep primeval landscapes before us, we must consciously counteract those factors that tend to destroy them.

Professor Duncan was also concerned about maintaining *variety* in landscapes. Yet most of our primeval landscapes *did* contain much variety. It is the areas subjected to heavy human impact that often contain the least variety. Most wilderness contains old and young forests, burns, snags, blow-downs, parks and meadows, beaver flowages, and numerous forest types. But where variety was not a part of the original scene I think we should not artificially create such variety. In Yellowstone, for example, lodgepole pine is nearly the only tree over vast regions. If it turns out that this resulted from a natural fire regime, surely we should not break up these lodgepole forests with planted or seeded blocks of species that were not originally present.

Perhaps these remarks make my position on maintaining natural communities clearer. In summary, I *do* think we are charged with maintaining or restoring the primeval landscape. The preservation of natural landscapes is indeed a fundamental objective of our National Parks and wilderness system!

MIRON L. HEINSELMAN
Upper Mississippi Valley Section,
Grand Rapids, Minn.

¹Jour. Forestry 63:440-445; Comments on "vegetation management in wilderness areas and primitive parks." Jour. Forestry 63:705. 1965.



Board of Conservation Directors

Ontario Provincial Association

National Campers and Hikers Association

34 Shandon Dr.,
Scarborough, Ontario,
Feb. 23, 1971.

BRIEF - Presented by Bruce & Marie Hyland, Zone No. 3 Directors for 11 chapters of N.C.H.A. in Ontario.

TO - The Quetico Park Advisory Committee.

Quetico is part of the Canadian Heritage, a part that should be preserved.

Quetico, the name conjures visions of voyageurs, Indians, pack canoes, furs, wild life, sparkling water and trees.

Quetico is a link with a past that has all too few examples left.

It is folly to assume that commercial logging can be carried out in Quetico without upsetting the ecology of the park, leaving an area that is neither the forest reserve, that it was set aside for, nor, "one of the last great primitive areas on the continent" as advertised by the Ontario Government.

While it is conceded that logging has played an important part in the development of Canada and is one of the prime sources of revenue, Quetico is not the only forested area in Ontario, although it may be one of the best. (All the more reason it should be preserved.)

"At the National Forestry Conference, Convened by the federal government in 1966, it was predicted that the total wood requirements of Canadian forest industries could possibly rise from 3.4 billion cubic feet in 1965 to 5.1 billion in 1975, and 13.9 billion by the year 2000. The requirements for pulp and paper manufacture would contribute most to this, increasing from 1.7 billion cubic feet in 1965 to perhaps 2.7 billion in 1975, and 9.2 billion by the end of the century."

The above figures are quoted from "The Forest Harvest", published by the Canadian Pulp and Paper Association, and would indicate that
"The Friendliest People in the World"



Board of Conservation Directors Ontario Provincial Association

National Campers and Hikers Association

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the future needs of the logging industry envisions far vaster areas than Quetico. It is our contention Quetico should be bypassed. For if the figures published by the industry itself are an accurate forecast, then other more extensive areas will have to be opened up, why not now?

I cannot over emphasize how we as Campers and Conservationists feel about the mutilations of our heritage. We protest now, we will continue to protest in the future and if our aims are not realized, we are prepared to use the ultimate democratic protest at the polls. In closing, we would like to quote further from the Canadian Pulp and Paper Association handbook "The Forest Harvest".

"Land-use policies must, of course, take careful account not only of purely economic factors but also human needs and cultural concerns. The demand for outdoor recreational land within a reasonable distance of the cities where most Canadians now live has increased enormously in recent years. It will continue to increase. So the use of some forest areas for fishing, hunting, boating, picnicking, skiing, hiking, camping and other outdoor activities has a higher priority today than twenty or thirty years ago. Meantime, a society which is increasingly urban and industrial will find in the forest, its lakes and rivers and wildlife, its beauties and its stillness, a refreshing antidote of city life."

We thank you,

W. J. H. H. H.
W. J. H. H. H.

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B R I E F

This brief is submitted in support of Quetico Park being classified as a Primitive Park under the Ontario Government's Classification of Provincial Parks system.

Certainly there are many important reasons for classifying the park as primitive and probably just as many arguments from industry for the continuance of logging.

I would like to base my brief on two aspects that I personally feel rather important in this whole question of Primitive Park Classification.

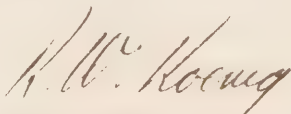
Firstly, what is our responsibility to our children and future generations? Canada is barely 100 years old and already we have depleted and drove into extinction many of our natural resources and wildlife. What will the next 100, 200 or 300 years hold? Are we going to take a "so what" attitude! Isn't it our duty and moral responsibility to preserve in its natural and primitive state at least 2 or 3% of the total forested land in Ontario for our children and their children to enjoy. The Ontario Government, in their description of Primitive Parks, clearly recognizes that man has a psychological need to know that wilderness areas exist. In other words, primitive, untouched wilderness is important even for those who don't actually and physically make use of it.

The second aspect on which I would like to dwell, is the importance of primitive classification not only for the elimination of logging and mining, but also for the elimination of motorized recreational vehicles.

A few years ago, on my first canoe trip through Quetico, we met a motor boat on Jean Lake. This probably doesn't sound too serious, but believe me, it deflated our whole trip. In today's hum drum world, it is most important that we have areas such as Quetico set aside where one can escape from the noise and pollution of gas driven vehicles. Calvin Rutstrum, a noted outdoorsman, put it this way, "the important thing to consider is that some areas should be left inviolate where mechanization is concerned, so that 'silent places' for those who want serenity can continue to exist."

In reaching a decision on the future of Quetico, I would urge the committee to consider not only the arguments that presently exist for and against logging in the park, but to also look to the future and what recreational demand will be placed on our parks 50 or 100 years from now.

Thank you for the opportunity of presenting my views.


R. W. Koenig
R. R. #1
Thunder Bay, Ontario



NATURAL HISTORY SOCIETY OF MANITOBA

February 25, 1971

A BRIEF TO THE ONTARIO DEPARTMENT OF LANDS AND FORESTS REGARDING THE PREPARATION OF A MASTER PLAN FOR QUETICO PROVINCIAL PARK.

Submitted by: The Natural History Society of Manitoba

President: J. Jack

Vice-Presidnets: J.M. Walker-Shay

M. McNichol

The Natural History Society of Manitoba, with a membership of over 500, appreciates the opportunity to present this brief relating to the preparation of a Master Plan for Quetico Provincial Park. Although we are an out of province organization, we feel the future of Quetico Park is of concern to all Canadians. A large number of our members are residents of Metropolitan Winnipeg, a large city closer to the Park than any comparably sized Ontario city. All our members are deeply concerned and interested in the future of Quetico Park.

Part of our stated objectives are -- "to foster an awareness and appreciation of the natural environment and an understanding of man's place therein to work for the preservation of an adequate representation of our Natural Heritage".

The main theme our N.H.S. wishes to emphasize is the desire to maintain the Park as a Wilderness Area with its associated diversity of flora and fauna. We feel the accent must be on wilderness. Wilderness has been defined as an area of "undeveloped land retaining it's primaeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to best preserve it's natural conditions".

Our views on some specific aspects of the park are as follows:

LOGGING

Commercial logging of any magnitude in the Park must be prohibited permanently. Without this as a major premise we are only deluding ourselves that the area can be a true wilderness. Without this, slowly (or not so slowly) the primitive areas would become interlaced with roads and camps and the Park would decline into a quasi-wilderness. One might compare this concept to the Hollywood Movie type facade of the old Western town -- all front with no real depth.

ROADS

There is no doubt a limited need exists for a few roads into key control areas to provide access in case of fire and to supply major Park services. These should be kept to a minimum and as unobtrusive as possible.

BOATING

One of the unique qualities and attractions of a true wilderness area is the complete absence of any civilized surroundings. It is the escape to the

"Sounds of Nature". Any other sounds are an intrusion and destroy the tranquility of the surroundings. The traditional mode of summer travel through Quetico Park is by canoe. Indeed the whole heritage of the Park, from the Indian and Voyageur days, is tied in with the canoe, and it is culturally significant that this link be maintained. Canoe routes have been established throughout the Park to accommodate all levels of expertise, from the rank beginner to the advanced canoeist. This allows almost anyone, be he young or old, the opportunity to enjoy the "wilderness experience" of travelling through the Park by canoe. We understand that the Park may be approaching the saturation point in regard to canoe tripping. On the basis of an average canoeist travelling approximately 20 miles per day it is simple mathematics to recognize that a motor boat that travels this same distance in a couple of hours would soon destroy one of the major attractions of the park, i.e. being alone in the wilderness.

It is recognized that the purpose of a wilderness park is not only to provide good canoe tripping, but the terrain of this area makes it ideal for this purpose. Use of canoes ensures a minimum of intrusion on the environment and minimal pollution. If any form of outboard motor was permitted in the Park it would be well nigh impossible to control the resulting noise, oil and exhaust pollution.

SNOWMOBILES

The fact that a large percentage of the Quetico area is river and lake helps to maintain its relative inaccessibility in summer and as already suggested this is further enhanced if only canoes are allowed access. The reverse holds true during winter, however, when most if not all waterways are frozen and snow covered. This provides quick and easy access to virtually all areas of the Park by snowmobiles. It is an unfortunate commentary, but a well documented fact, that there are many irresponsible snowmobilers who are guilty of wildlife harassment and other discourtesies. In a remote area such as Quetico, policing to prevent such irresponsible acts would be virtually impossible. On the other hand, with society's great increase in available leisure time it appears sensible to make use of such an area during our long winter. In keeping with the wilderness concept, however, the noise and speed of snowmobiles is not compatible with our need to escape the machines and noise so characteristic of our urban surroundings. Winter travel on skis or snowshoes is more in keeping with our need for adventure and physical fitness. The "maximum use" concept would completely destroy this wilderness aspect whereas the banning of snowmobiles would obviously keep the winter travel at a level which would have little or no harmful effect on the environment.

This should not be construed as an overall condemnation of snowmobiles. These machines are undoubtedly here to stay and they are increasing in number every year. We feel, however, that areas adjacent to large urban centers should be developed for snowmobile use, and Parks like Quetico spared.

GENERAL

The N.H.S. is hopeful that this and similar briefs, and the public hearings will bring about a review in depth of the complex problems involved with Quetico. We hope and trust that the Master Plan for Quetico will be prepared by a competent "multi-disciplined" team of professionals from such fields as biology, geology, ecology, resource management and recreation planning, etc. The value of the "team"

approach is that it ensures adequate consideration of all the resources and visitor needs from a wide variety of viewpoints. We would also suggest that the viewpoint of the layman is not forgotten. In this regard we hope that organizations such as ours may be given an opportunity to participate in the public hearings, given adequate notice of their date and location.

The Master Plan should clearly outline the specific objectives sought by the Ontario Department of Lands and Forests in the management of the Park. Quetico is unique in North America, a magnificent wilderness area but fairly accessible to an ever increasing proportion of the population of Canada and the United States. To protect this wilderness will require sound planning and controls. The Park as a whole cannot be managed on a "multiple use" basis to maximize direct economic gain without suffering.

The essential solitude of a wilderness cannot be maintained if all the artifacts of civilization are extended into the area. Wilderness qualities are fragile, they cannot survive exploitive management.

The development of the French Lake recreation area should be carefully controlled.

Finally, the N.H.S. wishes to stress again how important we feel the preservation of Quetico Park is to the people of Manitoba and all Canadians. We hope that Quetico will become a model that Manitoba and other Provinces will be proud to follow. Quetico Park is a treasure that must be preserved.

Respectfully submitted by

V. Wilshire
for the
Conservation Action Committee of
The Natural History Society of Manitoba.

BRIEF TO QUETICO ADVISORY COMMITTEE

In presenting this individual brief, I should declare my interest in Quetico Provincial Park. I am a middle aged physician whose interest was aroused belatedly when my children became old enough to go on canoe trips through the Park, which we have done in the last two years. As a result of this, I have read a good deal about logging in Quetico, park management in general, and have taken a fashionable interest in ecology. Though I am writing the brief it should probably be taken as being from the group of six of us who have been on these trips. It may be of additional interest because we are all Canadians living in North Western Ontario and therefore represent, if the figures are true, a fairly small group compared to the many Americans who visit the Park.

My brief is in support of the resolution that Quetico Provincial Park should be reclassified as a Primitive Park. I recognize that this would demand the immediate cessation of all commercial logging operations, the continued moratorium on mining operations, the restriction of road development and modes of travel within the Park, and would call into question the position of the present campground at French Lake.

I have studied Mr. James Jessiman's proposal that the Park boundaries be re-defined to exclude some areas at present being logged, in exchange for the inclusion of some areas of more natural park type. This is an interesting idea and I would not be opposed to it so long as this manipulation did not reduce the present Park area of over 1700 square miles; did not mean a further delay in the classification of the Park as Primitive; and the areas for inclusion could be agreed upon after inspection by responsible conservationists. However, I suspect that Mr. Jessiman's plan might only cause further delay in the prime matter of reclassification.

I believe that the Park should be reclassified as Primitive for the following reasons:

1. By implication, the present Government has thought that certain areas of forest should be classified as Primitive. This is shown by two facts. Firstly, the declaration of the Department of Lands and Forests "Classification of Provincial Parks in Ontario, 1967" which was "established in order to provide a meaningful framework for administration of the Provincial Park System", and in which "two new classes of parks have been declared. These are 'Primitive Parks' and 'Wild River Parks', and their establishment gives recognition of the increasing demands for outdoor recreation in a wilderness or semi-wilderness environment". It is ironic that despite these statements in an official publication the only Primitive Park so far established is the inaccessible Polar Bear Park.

Secondly, the Minister of Lands & Forests has stated that "approximately 50% of the park (Hunter Island) is now, and has been for many years, set aside for wilderness use". This is an area of approximately 900 square miles and suggests that the Department of Lands and Forests is not inherently opposed to having large areas of forest develop in an uncontrolled or wilderness manner, and despite arguments by others to the contrary, do not feel that this presents a fire or pest danger to surrounding forests.

2. For the long term preservation of a true northern forest ecology, Numerous arrangements have been put forward for the maintenance of such areas so that future generations will have an unmodified area for basic study. Even the official publication of the Ontario Forestry Association, 'The Forest Scene' has stated "some areas of forest will have to be reserved for single purpose use such as wilderness preservation and scientific study". As Aristotle said "to study the nature of a thing, it is first necessary to examine specimens that have retained their nature, not those which have become corrupted".

The truism that the forest has survived many thousands of years without the help of man has been stated many times, and while it is also true that such a statement requires modification in face of the destructive forces of modern times, it must be of interest to study how this survival and regeneration took place.

Dr. D. H. Pimlatt, a one time employee of the Department of Lands and Forests and now of the University of Toronto's Faculty of Forestry, cites one incident of the adverse affects of commerical logging when he wrote in the Toronto 'Globe and Mail', "We found a unique area of forest (in Lake Superior Park) being logged but the forester in charge had not recognized it was a special area. About three weeks later the Lands and Forests sent an ecologist to examine the area. His report supported the statement ——— but by then almost the entire area had been logged".

3. Quetico Park has the good fortune to have had many centuries of Indian life with such artifacts as the rock paintings and also to have been in the direct line of the old fur traders and immigrants route west. If preserved, it will be a permanent example to future Canadians of the origins and struggles of our people. One has only to spend a few days canoeing in the Park to appreciate the courage of these early travellers. Every nation tries to preserve examples of their past, cathedrals, temples, monuments, etc. Canada has few of these but is big enough to preserve large primitive areas as an example of its past. Once again it may be ironic that we are prepared to spend in excess of \$5 million to reconstruct an old fort at Thunder Bay but become concerned at the economic disruption that would be caused by the banning of commercial logging in the Park, which exists an example of what the fur traders fort was all about.
4. The Park is a perfect example of Canadian Shield beauty with lakes, rocks and forests made well known by the "Group of Seven". This beauty is a fragile thing easily destroyed by man made activities.
5. Finally, as I have rather belatedly come to realize, canoeing in the Park is a wonderful experience. For years we have had a cottage on a lake in what might be called a multiple use zone. We have logging, mining, commercial fishing, and recreational cottages, utility boats and sailing and sport fishing all round us. We have always enjoyed our cottage but a canoe trip through the Park provides a totally different, almost mystical, experience. It would be tragic if a Province as big as Ontario could not preserve this form of individual renewal.

These, then are the chief reasons why I believe Quetico Park should be reclassified as Primitive. However, I recognize the difficulties this may entail and will discuss those I think important.

1. Economic - The present logging operations must have involved some capital investment, and produce some revenue. Unfortunately, it is difficult to get completely unbiased information and I believe the Quetico Advisory Committee should probe deeply into this since no individual, or less authoritative group will have the facilities or experience for obtaining the clear facts.

To look at it at its broadest, we know that Quetico Park constitutes about 1% of the productive forests of Ontario (Dominion Bureau of Statistics) and therefore cessation of logging would not remove much forest from commercial operations.

Next we presume that commercial logging in the Park is not essential to any large Canadian paper company at present, since Domtar Woodlands are endeavouring to sell their subsidiary Jim Mathieu Lumber Ltd. to Ontario-Minnesota Pulp and Paper Company, an American company.

Therefore, our main concern is over the fate of the Mathieu Lumber company and its employees. It is clearly important that these men do not lose their jobs because the Mathieu Lumber is unable to provide services to Ontario-Minnesota.

Fortunately, the mill at Sapawe is outside the Park and so it is only a question of whether the mill can obtain lumber from outside the Park. The Committee will have to examine this matter carefully but it has been stated, and a common sense knowledge of Northwestern Ontario would support the statement, that there are ample supplies of wood outside the Park (Design for Development NorthWestern Ontario), and reasonably close to the mill. Since the relocation of timber limits would involve some expense, some form of compensation such as temporary abatement of stumpage fees might be necessary.

The whole question of job security in the face of mechanization of the forest industry requires examination. It has been said that "the number of jobs will be cut by between 50 and 70 per cent" in the next few years, (K.K. Nielsen, Vice-President, Woodlands, Canadian Pulp and Paper Association). If this is so, a Park devoted to recreation and scientific study, with its relatively high service employee requirements might provide much more stable job security.

2. Political - Any change in Park policy will depend on its political acceptability, and the Quetico Advisory Committee would be unwise to present advice to the Minister which could not be accepted because of its unpopularity. However, despite the fact that Northwestern Ontario depends on the pulp and paper industry for its economic survival, there seems to be no doubt that the Quetico issue is a hot one, with the vast majority in favour of stopping commercial logging.

Examination of newspapers, local radio stations, etc. would confirm this and the example of the supersonic transport (SST) funding defeat in the United States is evidence of the power of what might be called the "ecological revolution."

3. Forest management - As has been said before, many have stated that Quetico Park has been in existence for many thousands of years without the help of man. However, this ignores the overall impact of modern conditions in surrounding commercial forests and the fact that man will be using the Park quite extensively.

There seems to be three main dangers to the Park if it is classified as Primitive; fire, pests, and visitors. No easy answer exists, at least in the case of fire and pests. They would have to be examined carefully by the Park Management, and in fact, some logging on a non-commercial basis might be required. The National Parks policy is worth examining and states in part, "Forest operations whose sole or main object is the cutting and removal of timber for their commercial value alone should not be permitted." "All forest operations should be planned and carried out by the park administration or under its direct supervision and in such a manner that park values of the area do not suffer lasting damage." "The existence of licensed timber berths is not consistent with the purposes of National Parks and cutting rights presently held should be extinguished."

Visitors could be more easily controlled. Fortunately, when the only way to travel is by canoe, visitors will be confined to certain quite well defined routes. The fee for entering the Park could be adequate to cover costs, though certain groups might have to be subsidised; certain areas of the Park might have to be closed off for a time; and some form of prior reservation so as to keep numbers of visitors within reason might eventually be necessary. However, in 1970, we were able to travel for nearly three days without seeing another canoeist so that some areas of the Park are still not very crowded!

4. French Lake Campgrounds - Despite the fact that a classification of Primitive would be inconsistent with this campground, there should be no great problem. The campground is at the very periphery of the Park and could be excluded by redrawing the boundary or regarded as Park Headquarters. Anyone who has been to the campground knows it to be an attractive place and to suggest it should be torn down is ridiculous. However, it might be necessary to restrict entry into Pickerel Lake from French Lake.

Living in Northwestern Ontario I recognize how much we depend on logging operations. However, like many, I am convinced that they can contribute to the economy without cutting in Quetico Park, and if they are allowed to continue there, they will totally change the character of something unique to Ontario and Canada.

Respectfully submitted,


P. C. MacGillivray, M.B., F.R.C.P., D.C.H.

QUETICO PARK

Brief prepared by L. LYLE BOCKING,
Pres., Thunder Bay Naturalists,
and,
Member, Federation of Ontario Naturalists

February 25, 1971.

* * * * *

QUETICO PARK - FROM AN AESTHETIC VIEWPOINT

Beauty is a necessity for humanity. As population and industrialization expand, people are crowded into less and less space. As with animals, chaos results - the mob takes over, seeking release of tension.

There MUST be places of quiet and beauty, where at least some harrassed urbanites may re-charge in order to withstand the influences of noise, congestion and sordidness, which make up their daily diet of...living (?).

Instead of using the resources of parks for industrial purposes and thereby in a brief time, changing the area the present sites should be left in their natural state and many more green spots across the country should be made available for the refreshment of the people of Ontario.

Quetico Park, presently in question, is a "Paradise" ... a fragile thing of beauty which will suffer if changed abruptly in any part!

McKenzie Lake Area, in Dometar's cutting rights, is a place of interest and delight. Indian burial grounds are here, plus rock painting - among the best that have been found. It is also part of the old Historical Trail.

Four hundred feet, untouched, along the water courses, when and if meticulously adhered to is only a fake forest as those who know realize that beyond that fringe could be a wilderness of stumps.

Can we not leave this spot alone, at least long enough to learn the results of what has already been

done, before continuing to demolish...only too late to learn that Quetico will never be the same again?

One of the most widely known recreation areas in North America is the magnificent canoe country of Quetico Superior region. The mosaic of twisted lakes and rivers of Quetico Provincial Park, in Ontario, and Boundary Waters Canoe Area, of the Superior National Forest in Minnesota, has been described as "unique in the world" by the United States Outdoor Recreation Resource Review Committee.

In 1913, an Order in Council converted Quetico into a Provincial Park, "...to be reserved and set aside as a public park and forest reserve, fish and game preserve, health resort and fishing ground for the benefit, advantage and enjoyment of the people of Ontario and for the protection of fish and game and fur-bearing animals therein".

With the automobile came developments at French Lake, just inside the Northern Boundary of the Park where, to-day, facilities to meet the needs of the motoring camper and picnicker are available. The interior of the park is accessible only by water and is dedicated to those who seek water-oriented recreation and measure vacation successes in solitude, quiet and the sense of personal achievement. "We no longer destroy great works of art. They are treasured and regarded as being of priceless value; but we have yet to attain the state of civilization where the destruction of a glorious work of nature, whether it be a cliff, a forest or a species of animal or plant, is regarded with equal abhorrence". (Filme - 1961).

We believe that natural beauty, or whatever term one chooses to use for it, is an idea whose time has arrived! There is still much to be done and we still need traditional conservation. But America can now turn, and should now concern itself with the QUALITY of its environment as well as the QUANTITY of its resources", (L.S. Rockefeller, National Press Club).

LET US NOT DESTROY OUR MOTHER, EARTH! (These thought-provoking words were taken from a popular folk song, based on the Roman myth about the three brothers, striving to become the King of Rome, were told that the first one to kiss his Mother would become the king. Two raced home to do just that, while the third bent down, kissed the earth and became the King.).

* * * * *

L. LYLE BOOKING.

written by: Heather Bonmycastle,
RR#3, Cobourg, Ontario.

Logging in Quetico Park should be stopped and the multiple-use concept of park use discarded for redesignation of the park as a "Primitive Park." Rather than present a general argument in favour of this stance I have chosen to express my opinions on the aspect with which I have greatest familiarity and interest: the provision of an area in which people can partake in wilderness travel.

I am a canoeist who enjoys going with my husband on canoe trips which have in the past varied from two to ten days in duration. To date we have canoed only in Algonquin Park as I was exposed to the pleasures of canoeing for the first time only three summers ago and it takes several years to gradually get to know Algonquin Park and to increase in confidence to travel further afield each time. The two summer holidays we have had in three years have both been spent in this way. This summer we are hoping to canoe in Quetico Park.

There are a number of characteristics associated with a canoe trip holiday which I would like to outline for you to help in your understanding of the demands of a canoeist on his environment. Such a holiday provides a complete break with the city: the "hard" man-made environment, the efficient routine based on economics, the complexity of daily life, the pressures of a job, the inessentials associated with a materialistic society, the noise, lack of privacy, numbers of people, and other aspects resulting from masses of men pushed together in a small area. More important are the positive characteristics of a canoe trip: being alone with nature, noticing it, responding to it and learning to live with it and by it, living simply responding only to nature's demands. It is exhilarating, calming and finally totally exhausting. It allows a co-ordination of mind and body in living a simple existence.

What does this mean in terms of areas required for such activity? Size is important. Canoe routes must be provided in such a way as to allow for short two-day trips and longer, two to three week trips. Size also allows for a greater distribution of people so that the isolation desired by each person is not spoilt by the continual presence of others. Quietness is important. Tripping is not tolerant of other activities as it is the quietist of all. Motor boats

are noisy as are chain saws and trucks rumbling along gravel highways in the bush. Pollution is revolting, whether it is gasoline floating on the water's surface, or tin cans and beer bottles thrown away on a campsite.

I do not believe wilderness travel is compatible with other activities, except perhaps the conservation of nature, but I am not learned in ecology and would have to leave that judgement to others. The multiple-use concept is based on the compatibility of uses occupying an area. As such uses as logging, more civilized and high density recreation uses are not compatible with canoeing these uses should not be allowed in conjunction with canoeing.

The popularity of canoeing is increasing. A park well suited to canoeing, Algonquin Park, which is easily accessible to a large number of people is becoming overcrowded, not only by heavy recreation users and loggers, but also by canoeists. This problem is recognized by the Department of Lands and Forests. In reply to a letter of mine expressing concern about the multiple-use of Provincial Parks, Mr. Brunelle replied on October 23, 1970: "And where they parks occur, as does Algonquin, close to large urban concentrations, they will be crowded." The solution: "More parks is one."

While more parks may be one solution to overcrowding in terms of total numbers of users, repetition of multiple-use parks will not create the environments necessary for canoeing.

I have not been convinced of the economic necessity for logging in Quetico expressed in terms of men employed. Logging is a poor employment for any man, seasonal in nature and requiring men to leave their families and their communities in turn for short term employment. I have heard the number of men employed in Quetico Park quoted at around 200. I am sure that as in the past men have been replaced by mechanization in the logging industry, so in the future the industry will have few qualms about further cut-backs in the labour supply to the same end.

Logging in Quetico Park must be stopped in the 468 square mile area still under Timber Licence and now being cut. Values other than economic gain are increasing in importance in our society; so is our population and the increasing demands of all sorts that it will be placing on

the environment. Surely the small areas now held as Provincial Parks that are reasonably accessible to people should not be put to short sighted economic gain. At least one park, Quetico Park, should be set aside as a Primitive Park.

Heidi Bonnell

A BRIEF TO THE QUETICO ADVISORY COMMITTEE

Ontario Department of Land and Forests

by

Caroline S. Fairless

and

Blaine F. Fairless

February 26, 1971

Gentlemen:

We are delighted at this opportunity to write to you concerning the controversy of Quetico Provincial Park, especially since we attended the "Summit Meeting" in Quetico with an open mind and a deep-seated interest of long standing.

Our qualifications are simply that we are laymen who have worked with mammologists, ornithologists, ecologists, naturalists, and various groups on a number and variety of projects, and have consequently done a fair bit of reading and research.

As concisely as we are able, we will list our findings and feelings on the subject.

(1) First, we were surprised and disenchanted that the administration had not seen fit either to attend or even send a senior member to a meeting which directly concerns all the people of Ontario in addition to some from other provinces, and whatever value is placed on tourism from the states.

For those who had come great distances, both from other provinces and the states, it proved an attitude of disinterest, difficult to accept.

(2) Every aspect of the logging operation was ugly. The road, bridges, dumps, camp, but most of all the areas stripped, not only of trees, but also the magnificent ground cover of

lichen, mosses, fungi, and vital seed and berry-producing plants.

Even your non-professions are becoming aware of the interdependence involved in an ecosystem which has evolved for centuries, the stability of which simply cannot be replaced with attempts of reforestation, nor do we yet know what ultimate impact such partial destruction will have on the rest of the community.

(3) As the meeting progressed, several things became apparent. Although Domtar claimed they could not really legally sell their timbering license to Boise Cascade, only their buildings and equipment, it is unlikely that a lumbering company would pay \$2 million for said equipment without assurance of cutting rights. (Enter politics).

(4) Amid undoubtedly sincere promises by the lumbering companies of selective cutting, scientific management and careful removal of limited trees, it is hardly feasible that they would play such a benevolent role in aesthetics when their profit depends on practicalities which would indicate total depletion in any given area. We saw that total depletion. The depletion of an occasional forest fire, for example, can actually be beneficial and is not comparable.

The above reminds us that because it is unprofitable not to "total" an area, there will be those trees whose use is limited to pulp and paper. There is no reason to think that these trees would be transported to a distant mill at considerable expense and

so looms the threat of an eventual pulp mill in Quetico and its attending horrors.

(5) ECONOMICALLY. A spokesman for the Department of Lands and Forests informed us that the Department receives about \$15 million from companies cutting wood in Ontario annually. Last year (1969) \$16 million was spent on the timber management program which includes replanting. Your taxpayer makes up the difference and planting does not begin to replace the pre-existing conditions.

Employment is an important factor, in this case we are talking of 225 men which we feel are expendable in an issue as important and far-reaching as this one. However, they need not be. These men move with their company operations, and these companies hold licenses to large tracts of Crown land outside the park.

In addition, a certain number of these men could conceivably be employed as woodsmen, gamekeepers, tree doctors, and the like, which apparently is practiced successfully in Vancouver by Weyerhaeuser, Canada Ltd.. In any case, it would seem plausible to cease operations in park while the numbers of employed are still low.

(6) HISTORICALLY. There are the famous canoe routes which must not be marred by bridges, roads, debris and the consequent roaring trucks and saws, with the heavy hand of man shattering the

mystery and wonder of the privilege of being in that country.

There are the Indian rock paintings which have endured for an undetermined length of time. Logging roads will bring the kind of people who will add their initials to the paintings. Those who portage a canoe will not. Historic routes, Indian graves, and Indian legends should be allowed to weave their magic spell unmolested.

In addition, there is a ^{FIFTY} ~~fifteen~~ year history of a series of remarkable battles for the preservation of the combined Canadian and American park proclaimed an International Peace Park for World War I.

The cooperation of the two countries in dealing with the numerous threats is admirable and it embraces previous logging threats and subsequent roads, Hydro, air-space reservation, land acquisition and consequent lodging, outboard motors and many others including mine claims which are presently under fire. In the states and in Canada apparently over 100 still exist.

For half a century, countless numbers of peoples have worked their hearts out to keep this a wilderness area and if for no other reason, it should become an inviolate sanctuary and unique testimony to the combined efforts of two great nations.

(7) GEOLOGICALLY. Unrealized by many, Quetico is a most valuable recreation area because of its glaciated rock formations, which lend themselves to portaging and camping whereas your black spruce and muskeg areas 100 miles to the north do not.

Water, so far, is unpolluted and increasingly unusual situation even in Canada.

It has taken 10,000 years to accumulate precious few inches of soil and intricate growth on these rocks. Visualize the work of the bulldozer.

Nowhere in Ontario, easily accessible to the public, do there remain the magnificent white pines which once covered central and southern Ontario with the exception of a few stands in remote sections of Algonquin Park, which unbelievably, are still being cut. Some maturing red and white pines still exist in Quetico and they are among the prime targets.

(8) GEOGRAPHICALLY. Quetico is accessible to most of Ontario and this will become exceedingly important. The answer to the question "why make Quetico a wilderness area when Canada already has too much wilderness" is to us, and countless numbers of people to whom we have spoken, very apparent.

(a) More and more people are seeking outdoor recreation as has been proven by the unfortunate overcrowding of many provincial parks. However, the majority seek these pleasures with their campers, planes, motor-boats, snowmobiles, motorcycles and the like. They are accompanied by children too young to appreciate, and family pets unsympathetic to the existing wild life (such as it is in these areas).

(b) There is a notable and increasing trend toward a much more primitive and self-reliant type of camping in which men and women feel the deep-seated need to shake all vestiges of their normal hectic lives and seek the solitude, the spiritual uplift, the serenity and wonder and oneness with nature which only a true, unfettered, wilderness can give. This is not romanticism, students of human behavior are

becoming convinced of this and even sounding the alarm as to the consequences which may be expected should these opportunities be denied. Numerous books and letters supporting this theory are available.

(c) Then there are the students of natural history, the study of ethology, animal behavior and its relations to human behavior an increasingly popular and important science not to mention innumerable research programs into the life cycles of plants and animals in their natural state, and there are pathetically few areas which are virtually untouched by man. Where do these groups go?

(d) Quetico, geographically accessible and relatively unspoiled is a very logical answer but logging will change its face, its character and its ecology. Only if it becomes inviolate will it fulfill the ever increasing needs of the very near future.

(9) POLITICALLY. Many of us feel that Mr. Brunelle has done some very disappointing things in this area. He has had the golden opportunity to purchase the timber licenses as the Federal Government has successfully done in Glacier National Park and Mount Revelstoke.

We believe that Ontario's citizens who cannot be expected to know of some of these issues should be protected by their government and not be obligated to beg and plead for their heritage.

The fact that there have been so many articles, editorials, mass turnouts at meetings, innumerable letters plus the significance

of the resignation of such a valuable man as Gavin Henderson should indicate to Mr. Brunelle that the people are trying to tell him something.

We would like to point out that in the States more people are becoming increasingly aware of their environmental heritage and are indeed voting out of office the politicians who remain insensitive to their feelings and who continue to exploit their precious wilderness. A prime example is the recent ousting of one Don Samuelson, governor of Idaho, who in the name of "multiple use" was planning to turn over the magnificent White Cloud Mountain area to the American Smelting and Refining Company, for purposes of dredge-mining its wild and scenic rivers. As in Quetico, the pressure was greater than the benefits and the people, looking to the future, made their move.

In closing we would like to comment on a few of Mr. Brunelle's statements in a paper of November 12.

1. On page 2 he says that some cutting is being done in the least used part of the park which does not compare in quality or potential with other parts of the park.

Let us remind you that we are still talking the long range program (which must be started now) and as ever increasing numbers seek refuge and research areas in the park, the beleaguered wildlife will be forced, as usual, to retire to these quieter places which must be kept free of harassment if they are to perpetuate their species.

2. On the same page Mr. Brunelle admits that high pressure for recreational use may expand to the northeast, therefore the government shall have to review their cutting and curtail or eliminate it if warranted.

Argument: By then the cutting will have been done, unwanted roads built, and the ecosystem destroyed making the area unsatisfactory for man or beast.

The government itself has stated that Quetico is one of the last great primitive areas on the continent yet they would allow some 800 square miles to be torn asunder by an unnecessary series of very final logging operations, final at least for several generations.

3. On page 3, Mr. Brunelle states that the present Natural Environment Classification provides for a wide variety of outdoor recreational opportunities to meet many interest groups, whereas the Primitive Classification imposes stringent use restrictions.

Here lies the most important point of all. There are innumerable parks in Classification (III), and none which are readily accessible in primitive Classification I. This does not seem logical in your most populated province, which population is growing by leaps and bounds and which province will eventually need this kind of refuge perhaps more than those provinces which have already declared some of their parks primitive.

(4) No roads would be permitted, says Mr. Brunelle, and an

existing campground phased out.

This is an undisguised blessing. It would eliminate campers, trailers, motorboats, garbage, pollution, all the things aforementioned and maintain one invaluable area where man can renew the rewards of his own efforts, resources, imagination, ingenuity and tolerance.

For those who cannot make trips into the far north because of time or money, lack of experience or endurance, Quetico would be their salvation.

The existing red and white pine could continue to mature to proportions seldom seen by our present population.

A laboratory, uncontaminated, would be readily accessible to vital research.

If Canada and the U.S. would secure their joint wilderness area from lumbering and mining interest we would have an inviolate and incomparably primitive yet accessible, Park of Peace unprecedented in world history.

There is one final thought. Polar bear, Killarney, Quetico', superior, Algonquin, and Mississagi together comprise only 3% of the total land mass of Ontario as we understand it. Thus we honestly and sincerely find it incomprehensible as to why there should be such an uproar over a piece of land one half of 1% of the entire area of the province when an undeniably growing number of our scientists, naturalists, hikers, canoeists, outdoorsmen, citizens who admittedly have no desire to even see the area, people from provinces as far as B.C., numerous environmental organizations from the states, newspaper men, photographers, and countless

students whose lives, and those of their children, will probably be more enriched than most others, have shown their sentiments in favor of the Primitive Classification in every way they know how. Surely, their needs and desires are more important than a multiple use practice (of which you have so many) in such a relatively small and coveted area, when 99½% of the provi remains for the myriad activities and occupations of the majority.

Caroline S. Fairless
Blune G. Fairless
Box 47
Beaumaris

A Brief
to
Quetico Advisory Committee
of the
Ontario Department of Lands and Forests

February 26, 1971

I feel that I am ill prepared to add to the accumulation of facts and figures which you doubtlessly have at hand which concern the past and current use of Quetico Park. My recourse would be to support the stand taken by the Ontario Federation of Naturalists and other conservation groups which call for an end to further industrial activities in Quetico Park. In attempting to explain my point of view I would like to refer to a mural I once noticed in New York City. The scene depicted was an even more grotesque conglomeration of buildings than one usually sees there. The explanation was that this painting showed the many various buildings, cultural and commercial, which people had proposed being built in Central Park. Fortunately, the authorities overruling the use of that area had prevented such exploitation and there is still a place in that concrete wasteland where people can escape from the pressures that attempt to engulf them.

I feel Quetico Park is in such a position and as such ought to be protected at all costs. I feel a mistake has already been made in allowing logging in the area and highway construction through it. While the whole area has not been opened to logging (as I understand it) I feel it is still possible for the Department to change its position. The fact that you have asked for briefs suggests you are open to suggestions. In that spirit then, I would like to make the following recommendations.

Quetico Park would henceforth and permanently be closed to all industrial activities (such as logging and mining). With this being the case, a spraying programme would seem redundant except when extreme outbreaks threaten neighbouring stands outside the park. The park would then be available for special recreational and research activities. People who wish to visit the park would have to do so on foot or by self propelled watercraft; motors of all types (outboard motors, snowmobiles, and aircraft) would be banned beyond a 5 mile radius of major communities and failure to comply would result in confiscation of all gear. The only exception would be the equipment necessary for Land and Forests personnel to patrol the area. To effectively carry this out would require the setting up of outfitting stations and requirements regarding supplies (such as no canned goods or bottles) and enforcing the use of a guide for all trips beyond the "motor" area. An attempt should be made to determine how much human traffic various sections of the park can stand before the "wilderness aspect" (beyond the motor limit) is lost. I would suggest two people per square mile might be suitable for a start. Bookings would be required in advance to make such a trip and there would be a definite proportion of Ontario residents, Canadians, and Americans allowed.

Continued....

over

If the campgrounds were filled they would close for the year. This is not great, not people using camping areas near the roads but it is a disappointment that there would remain in Ontario a place where people might go to be away from others. Surely a province with this potential wealth, and territory can set aside this unique part of its past as a reminder of "the way it was" and keep it for those who want it. Camping and hunting might be similarly stringently regulated. In conclusion, I don't know what amount of lumber is removed from Ontario annually but it wouldn't surprise me to hear that it was just about what Toronto and Hamilton buried annually in their garbage dumps. After all the first growth is cut out and therapeutically felled into waste, we will have nothing but a pile of ashes. The price will be something we can never have again - a primeval wilderness. I don't think it is worth the price.

Yours sincerely,

K G Watson

K. G. Watson,
103 Upper Paradise Road,
Hamilton 43, Ontario.

KGW/ea

BRIEF TO --
QUETICO ADVISORY COMMITTEE

Presented by--

David L. Hearn

Vice Pres. Thunder Bay Field Naturalists

Member of Federation of Ontario Naturalists

I would like to submit this as a brief to the Quetico Advisory Committee.

by

David L. Hearn

February 27, 1971.

Why Logging in Quetico Destroys the Ecology.

Logging in a particular area of forests completely disrupts the ecology of the area and in most cases this will never return to normal especially if the land is reforested by mechanical means. Why does this happen?

Perhaps a few points in the way of a description of the type of biome would enable a clearer picture of the area in question. Quetico area is considered a Taiga biome. The topography is mainly post-glacial with many lakes and bogs and poorly drained, thin, acid, mineral soils.

Temperatures have a wide variation and precipitation averages from fifteen to forty inches a year.

Conifers compose the main tree growth (before original cuttings) and because of the waxey nature of the evergreen leaves are highly efficient at preventing water loss through the epidermis.

The growing season is short but the evergreen is well adapted to making good use of short warm spells which prevail in this area.

Black spruce is the dominant tree in this area, although alders, willows, birches, aspens and poplars are prevalent. Moose are prevalent in the area as well as black bear, marten, fisher, porcupine, red squirrel, varying hare, wolf, red fox are all found as well as other mammals. Bird species are numerous (147 species noted in summer of 1970 in Quetico), not to mention the countless invertebrates.

Must all these members of an area be disrupted and forced to dislodge themselves and seek other environments to carry on their meagre existence.?

But why are they disrupted? Because of the logging. Huge tractors with large tires trample and chew all forms of vegetation from the delicate mosses to the young conifers and deciduous trees, which are of no present economic value to the logger. In areas some of the thin soil has been removed (including both layers A and part of B in the soil horizons). In such an area of the park, regrowth would be slow if possible at all.

But what happens if the area is reforested with new trees planted mechanically or by hand? We have rows and rows of tall straight trees planted as close as economically feasible. A

beautiful woodlot, but no where near the original sight of the trees planted by nature. In many areas nothing grows underneath. Let us look at some of the mammals. It has been said that moose abound in areas which are cut over, but, the question is when. The trees are cut, the water holding capacity of the soil is lessened, the water table goes down and the brouse in the wetlands which generally feed moose in summer soon disappears. Can this type of situation attract moose?

Wolves would be displaced, since, their source of food being rabbits, and sick and weak deer and moose will have left. If wolves can not live in such a protected area as a park than where can they live, since, we seem to keep the archaic bounty on the wolf causing it to be harressed in all other sectors of the country.

Concerning the thin soils -- just how much regrowth will the soil sustain? Surely with such thin soils the amount of nutrients must be quickly used up.

I am sure that some of the facts which I have brought out are only a small portion in whole ecological upset by logging in the Park. The fact is that the ecology is upset and as such destroys the means to study and enjoy a natural environment, so, why must this rape of the forests be continued in one of the

tracts of land which is set aside as parkland in the Province of Ontario (Quetico). Logging should be curtailed at once in the park and it should be designated as a Primitive Park.

David L. Hearn

Vice President Thunder Bay Field
Naturalists

Member of the Federation of
Ontario Naturalists

Feb. 26th. 1970

Mr. R. T. Thomson,
Secretary, Quetico Advisory Committee,
Department of Lands & Forests,
Govt. of Ontario,
FORT FRANCIS,
Ontario.

QUETICO PARK

Dear Sir,

Please designate Quetico Park as a Primitive Park as soon as possible.

The widespread public discussion on this subject is a clear indication of a general concern for the future quality and quantity of our Provincial parklands. Once lost, replacement of natural areas such as Quetico is impossible. I hope that the government of Ontario will direct its efforts energetically towards the acquisition of many more areas similar to Quetico - as well as to parklands affording more active uses. Depletion or destruction of any of our existing parklands on the grounds of economic expediency or otherwise is unthinkable.

Yours very truly,



Howard V. Walker

P.O. Box 303,
Shelburne, Ontario
February 27, 1971

R.T. Thomson
Secretary,
Quetico Advisory Committee,
Ont. Dept, Lands & Forests,
Fort Frances, Ontario.

Dear Sir,

The following is a brief concerning the management of Quetico Park.

Introduction

1. Because Quetico Park was established in 1913 by the "Order-in-Council" which brought it into being described it as: and I quote, "a public park and forest reserve, fish and game preserve, health resort and fishing ground for the benefit, advantage of the people of Ontario, and for the protection of the fish, birds, game and fur-bearing animals therein," the management of such a park should bear a direct relationship to the restrictions placed on it by its founders.

2. The points at issue in the management are:

- a) Should logging of any kind be permitted in the Park?
- b) Should roads be constructed into the interior of the Park for logging or any other purpose?
- c) Should outboard motors be allowed?
- d) Should snowmobiles be allowed?
- e) Should trapping be allowed?
- f) Should aerial spraying with pesticides be allowed to fight budworm?

Brief Proper

Management of Quetico Park should reflect the restrictions of its founders, for

- 1- Logging should not be permitted in the park, for
 - a) logging of any type would necessitate the building of roads
 - b) Would defer from the aspect of the park being a forest reserve
 - c) and would not comply with the Ontario government's recent advertisement of the park as "one of the last great primitive areas on the continent"

- 2- Roads should not be constructed into the interior of the Park for logging or any other purpose, for
 - a) The park has recently been advertised as "the largest accessible wilderness canoe area in North America"
 - b) other means of transportation are available for fire prevention or rescue operations e.g. planes, helicopters, dog sleds
 - c) the roads already constructed by Domtar Pulp and Paper Products company are detrimental enough to the primitive aspect of the park in the eastern area
- 3- Out board motors should not be allowed, for
 - a) the pollution of the water by such motors is evident all through lakes in Southern Ontario, statistics are available from Pollution Probe
 - b) fish are killed off by the pollutants ejected into the water by such
 - c) it is advertised as a "canoe area", Leave it that way
- 4- Snowmobiles should not be permitted, for
 - a) although snowmobiles are effective in the snow for winter rescues and for trapping, public use of such vehicles could only present destructive results. They have been misused in such acts as destroying small trees, bush etc., and the killing of animals through chases which result in exhaustion of animals
 - b) there is no way of policing or restricting snowmobiles it seems
- 5- Trapping should not be permitted, for
 - a) it does not comply with the fact that the park is a fish and game preserve and that it is for the protection of the fish, birds, game and fur-bearing animals therein
 - b) The park is a sanctuary for endangered species such as the timber wolf and trapping might bring about extinction of such
- 6- Aerial spraying with pesticides to fight spruce bugworm is a debatable topic.
 - a) pesticides are dangerous no matter how well tested and aerial spraying is not the safest way of doing it, however economical
 - b) pesticides can prove to have effects on other species of plants or animals and could cause pollution of water if not properly sprayed(wind can affect spraying)
 - c) pesticides are beneficial in that by aerial spraying great areas can be covered in a short period whereby maintaining the primitive aspect

Conclusion

What I have said is that no logging, roadbuilding or outboard motors are permitted within park boundaries. Nor should snowmobiles or trapping be permitted. Aerial spraying is a possibility. All these relate to the outlines laid down by the founders.

Today's government should do no less as they are only representatives of the people and are there to serve the people.

Keep the park as it was meant to be.

A concerned student

Mary Dunham

We, the undersigned, agree:

Paul Ritchie
Bob Foster
Nancy Gardner
Alice May Jordan
Ewen Elgie
James Hume
Jim Anderson
Bob Crowther
Kim Miles

Council Organized to Protect the Environment,
22 Tarlton Road,
Toronto 7, Ontario.

February 27, 1971.

Mr. R. T. Thompson, Secretary
Quetico Park Advisory Committee,
Ontario Department of Lands & Forests,
Fort Frances, Ontario.

Gentlemen:

Council Organized to Protect the Environment (C.O.P.E.) wishes to add its voice to the chorus of citizens' groups who have expressed concern over the future of Quetico Park. Present members of C.O.P.E. include the United Church, the Anglican Church, the Y.W.C.A., the National Council of Jewish Women, Junior League of Toronto, B'nai Brith, branches of the Presbyterian Church and of the Unitarian Church, the Baptist Church, Home and School Councils, and several synagogues, conservation groups, and individuals. Of course, it would be absurd to suggest that all C.O.P.E.'S members express one viewpoint on any matter; only in their general concern and in their appreciation for the opportunity to address this committee do the views of C.O.P.E.'S members approach unanimity. The following brief is an attempt to articulate the feelings of concern, malaise, and frustration that have attended discussions in Council of Ontario's park system, especially Quetico.

The historical instruments of forest management were fire, wind, disease, and insects. With these instruments nature constructed a dynamic balance -- the tendency of sun-dependent pioneer stands of birch, poplar, and pine to succeed to the dense understory populations of shade-tolerant trees such as cedar, spruce, and balsam fir was combatted in a random way by these natural methods, especially fire, which attacked most frequently the older trees, the well-developed undergrowth and the organic floor cover of wooded areas approaching "climax" conditions. Hence, regeneration became possible although usually some older trees survived, especially those with long, thick trunks. Nature's management resulted in complex forests - natural ecosystems of great beauty and variety which existed for countless generations subject only to geological consent.

By exercising his tremendous ability in satisfaction of his seemingly insatiable needs, man has broken the links in natural ecosystems. Logging, grazing, mining, agriculture and industry, and hunting, trapping, and fishing have brought great wealth, freedom, and excitement to the human condition, but they have also threatened the richness and stability of the natural world. The natural ecosystems of complex forests and the animal life they house are insurance against man's mistakes; they provide repositories of information of tremendous value for agricultural, zootechnic, and medical research, for the historical and ecological insights their study reveals, and for the clues they may provide to assist man in his management of the systems man has altered for his own purposes.

The enjoyment that people derive from Ontario's parks and the importance they attach to the preservation of wilderness areas appears to have been recognized in Ontario by the Department of Lands and Forests. "The Ontario Provincial Parks are dedicated to the people of Ontario and others who may use them, for their healthful enjoyment and education...To better serve the people of Ontario and their visitors two new classes of parks have been declared. These are 'Primitive Parks' and 'Wild River Parks', and their establishment gives recognition to the increasing demand for outdoor recreation in a wilderness or semi-wilderness environment." (Classification of Provincial Parks in Ontario, Department of Lands and Forests, 1967) Obviously, Quetico was intended to be such a park for the Ontario Government advertises it as "the largest accessible wilderness canoe area in North America."

The only question then is "Who is to manage Quetico Park?" Nature has always been a competent manager, and it seems likely that with some effort directed at maintaining the ravages of fire at pre-man levels nature could still be trusted. However, the management of parks cannot be completely divorced from the management of adjacent commercial forests. Fire and insects and disease must be combatted not only to protect the park but to protect the forest

industries and communities adjacent to the parks. No one knows how much protection is necessary - too little protection is dangerous and too much protection would force a new and unknown sequence of successional changes in plant and animal communities with loss of many species of both. Too much protection may be dangerous as well since the resulting accumulation of organic matter and forest fuels may lead ultimately to an uncontrollable conflagration, or the process toward climax conditions may expose the forests to epidemics such as spruce budworm.

What is the solution? Enlightened foresters realize the importance of maintaining "a balance between economy and ecology". They point out not only the great economic and historical position of the forest industry in Canada but also the great contributions to forest management that controlled forestry operations are capable of making. They state that controlled logging allows the forest to regenerate and encourages the survival of many animals that require pioneer-type forest for survival - all of this without the benefit of nature's cruder and costlier ways. In fact, the point is made that forestry operations, by removing dried and natural timber, by training loggers in fire prevention, and by providing logging roads with quick access, actually reduce the number and severity of fires. Timber-cutting also produces nutrients such as fallen branches and leaves that enrich the soil and enhance growth conditions.

On the other hand, naturalists claim that such management at best destroys the complexity of natural ecosystems, obscures forever the historical enchainment, a naturalist's window to the past, and introduces an artificial quality to the forest in terms of species composition. To the naturalist, a forested area that does not have a good representation of old forest stands lacks a very important element of natural diversity because it would lack, or have a very few of, many animal species which are dependent in one way or another on old or rotting trees. Many naturalists also claim, by the way, that rather than producing nutrients, timber cutting reduces soil nutrients with every tree-length trucked away.

The argument does not end there. Laymen may agree with foresters that controlled logging need not necessarily threaten the worth of entire parks for recreation, but the overwhelming majority at C.O.P.E. feel that to leave some areas alone as much as possible is simply right. Quetico Park is one such area.

This conviction is supported by two arguments. Firstly, laymen must be forgiven if they appear skeptical when foresters talk about ecology. No one could possibly point with pride to the forest industry's past record of concern for environmental control. To be fair, one must acknowledge that until very recently very few people could escape that criticism. Nevertheless, those who have seen rivers and lakes polluted by the effluents of pulp and paper plants and, more relevant perhaps, those who have seen or read about logging roads constructed parallel and across canoe routes by the crudest use of bulldozers, roads with extra wide rights-of-way built so that soil bulldozed into the middle could form the road bed thereby reducing construction costs, roads built by bulldozing the trees and soil off a hillside to fill the bottom of a valley to obviate the need to construct a bridge - those who are familiar with these things have difficulty forgetting them. When observers note that timber croppers more often than not have made not attempt to protect, or even identify, the most unique forest communities so that rare stands of red spruce and old white pine have been cut and yellow birch has almost disappeared from Algonquin Park, is it any wonder that laymen are not prepared to entrust the future of all forested areas to lumbermen?

The word "all" is the key word to the second argument. Perhaps it is unfair to suggest that future policies of forestry companies will be no different from past ones; certainly giant improvements have already been made. But no one is requesting that huge areas be withdrawn from the timberman's domain. C.O.P.E. is only suggesting that "to better serve the people of Ontario", some accessible parks should be classified as "Primitive" and not logged. Over 90% of all forested land in the Province has been placed under timber licence to individual forest industries including 95% of Algonquin Park and 95% of Lake Superior. It is beyond belief that the forestry industry requires half of Quetico Park as well.

"There is in the experience of wilderness something beyond the physical sense of trees, water and rock. There is a sense of the beginning of time, the creation of life - a sense of spiritual being...[In Ontario], endowed as it is with such distinctive natural beauty, it is our responsibility to preserve unique areas of land for present and future generations who understand and appreciate their link with the natural environment." Whether for scientific investigation, for canoeing, hiking and camping, or simply because so many people feel it is right, "areas should be preserved in which the cycle of nature is all that disturbs and changes the landscapes, except for the presence of man [and the limited management by professionally qualified naturalists that man's presence necessitates . In such an area] the aura of wildness permeates every tree and rock and becomes part of man. To disturb such an area by mechanized forestry methods breaks the delicate web of life."

Members of C.O.P.E. know that logging is essential to our way of life, but the idea of taking what we once understood to be a protected park and logging it on a modern mechanized scale seems to be a bad error in judgment both as to "What is wilderness?" and as to the desires of what we believe to be the great majority of Ontario residents.

C.O.P.E. asks that larger areas of the parks, especially Quetico, be re-dedicated "to the people of Ontario". We hope that forest industries will continue to improve their methods of forest management in the enormous area of the Province that is their domain. We also hope that the Department of Lands and Forests recognizes its great opportunity to study and assist nature in the tiny area that can and should remain Nature's domain.

Thank you again for the opportunity to present this brief. C.O.P.E. welcomes your comments.

Respectfully,
Council Organized to Protect the Environment


per Robert Eisenberg

c Hon. Rene Brunelle

Brief for Quetico Advisory Committee

There was a time when Canada's fish, forests, water and space seemed limitless and inexhaustible. Recently we have all been rudely awakened by the frailty of our environment and our arrogance regarding our use of it. A few years ago those who challenged economic development and progress in the name of conservation were regarded with the bemused tolerance normally reserved for eccentric bird watchers. Today we find that yesterday's crackpots may have been prophets.

I, however, do not attack the lumbering of Quetico Park on environmental grounds. My point is that the activities presently taking place in Quetico are economically unsound. Our method of measuring our provincial wealth has certain defects which often make it difficult for us to realize the relative benefits of alternative courses of action.

Gross provincial product measures the total value of output irrespective of the nature of that output or the associated "spill over" costs. Thus, by way of example, to the output of the petroleum industry is added the output of industries manufacturing anti-pollution devices to control the emission of hydro-carbons. Clearly the net gain to society is somewhat less than the sum of the output of the pollution producing industry and pollution control industry.

In short, we have no way of subtracting total costs from total benefits in order to arrive at net gain. Would you invest in a company that showed revenues but no expense or profit figures on its income statement?

The problem then of assigning priorities in the public sector is a difficult one. Lacking any standard theory or methodology competing claims are difficult to judge. Clearly the opinion of the industry and those trained in the techniques of forest management must be subject to the review of those with a comprehensive view of the long run public interest. The economic time horizon of the private entrepreneur almost never exceeds twenty years and often is as short as two, but our children will inhabit this province as long as man lives on this planet. It is with these facts in mind that I submit the following points for your consideration:

1. Our forests are an economic asset. The fact that we do not have a balance sheet for the public sector does not negate this fact. We can convert them into cash by

liquidating them or we can both use them for recreation and let them appreciate. The value of our forests increases with time. Demand is increasing and supply is very rapidly decreasing.

2. While timber can be a renewable asset it is only renewable with extremely careful management over very long periods of time. The increasing shortage of timber in general and the experience of Boise Cascade Co. in particular give little assurance that this asset is being renewed as fast as it is being expended. In other words, we are eating into our capital.
3. The use of mechanized equipment, as opposed to skilled men both reduces the employment opportunities provided by the resource and destroys small trees not yet of sufficient size for optimum commercial return.
4. The future returns from scientific research that can only be carried out in an intact quietico environment will be lost forever if present types of plant and animal life are destroyed.
5. Service industries and particularly the recreation industry are growing more rapidly than the traditional industries. The lumbering of quietico will destroy much of the recreational potential of the quietico area.

The present demands of those who stand to directly benefit will of course be loud and insistent. Their whole purpose is to make money by cutting down trees.

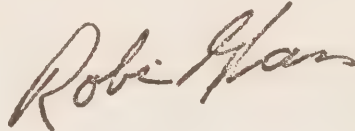
Iceland, that cold rocky land of steam pools and snow was once covered with a magnificent coniferous forest. Now it has all the vibrant life of the mood. The cedars of Lebanon are a biblical memory long since replaced by an arid semi-desert. No private business has ever called a profit making venture uneconomic. But to discover the true costs of lumbering Quietico we must go beyond salaries and depreciation on buildings and equipment.

How many young trees are destroyed by mechanized equipment? How many workers are displaced by mechanized equipment? What would the timber be worth twenty years from now? Have independent scientists commented as to the

adequacy of the silviculture of the Boise Cascade Co.? What is the value of lost recreational potential? Have medical research scientists exhausted their studies of that animal now almost unique to this area, the wolverine?

I have evaluated these factors and I have concluded that the economic costs outweigh the benefits. To err because of ignorance is understandable; to err because the quick buck is given priority over long run investment would be a disastrous betrayal of the public interest.

Respectfully submitted,

A handwritten signature in cursive script, reading "Robin Glass". The signature is written in dark ink and is positioned above the typed name.

Robin Glass,
Chartered Accountant.

242 Robert Street,
Toronto 179, Ontario.

University of Toronto Schools
371 Bloor Street West,
Toronto 181.
February 25, 1971.

Mr. R.T. Thomson,
Secretary, Quetico Advisory Committee,
Ontario Department of Lands and Forests,
Fort Frances, Ontario.

Dear Sir,

Each summer I co-direct the Outdoor Education Programme for the College of Education during their summer training for Physical Education teachers. I introduce some forty of these teachers to canoe tripping from the Forest Technical School. Also I take approximately 80 boys from U.T.S. in two groups to the Dorset Technical School for a week of outdoor winter activity.

I have been a resource person and instructor at several workshops and conferences in Outdoor Education given in Ontario for teachers. I have also conducted many canoe trips for both adults and teenagers in Haliburton and Algonquin Park. All of this was for the purpose of training them to take out their own groups.

There is therefore one aspect of the future use of Provincial Parks by the Secondary School teachers where I am most qualified to make a prediction. I suggest to you that in ten years you will not have sufficient park space to supply the demand for canoe tripping and hiking. It will catch on much as skiing has done in the last few years. The following statements support my prediction.

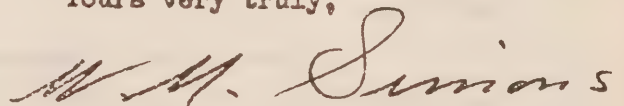
- a) Several Boards of Education have well-organized Outdoor programs and some even own Camping equipment and canoes.
- b) Several areas have already made their initial canoe trips. The main hindrance now to a quick expansion is lack of equipment.
- c) Think of the hundreds of young teachers I have introduced to tripping. Their influence will soon be felt in the schools where they teach. And I am only one instructor among many who is trying to create this interest.

d) The most important factor for the future of Outdoor Education is the withdrawal of June examinations in most school systems. This will allow thousands of students to take part in Outdoor Programs in May and June!

I urge you to preserve Quetico and Algonquin areas. Large commercial lumbering operations require heavy equipment. Thus permanent road beds become necessary. Then a vociferous minority demand and get the right to drive a car through the area and soon the road needs to be surfaced. That is the beginning of the end of a wilderness area.

I have included two short papers with ideas for the future. Thank you for your consideration.

Yours very truly,

A handwritten signature in cursive script, reading "W. M. Simons".

William M. Simons

Encl.
WMS:hf

Solution to Future Problem of Lack of Wilderness Area

1. Remove the name "Park" from the large areas. The word "Park" suggests that there will be hot dogs, refreshments, tester-toters, swings and picnic tables. It suggests that the tourist can park his car beside his tents. How can you possibly refer to both Quetico and Sibiash Point as "parks"? I suggest that Algonquin, Quetico etc. be referred to as "Wilderness". Then citizens will not expect to drive their cars throughout the area.
2. Large wilderness areas should not allow roadside camping within its environs. This can be done in campsites, trailer camps outside the area. These sites should be commercial, private as well as Department of Lands and Forests. The above facilities should not be placed on the most scenic location beside a lake! European countries have a quaint habit of preserving their beautiful areas to walk in, and the camp location is in some rather non-scenic field.
3. The "midway or carnival" atmosphere along the road in Algonquin, for example, must be reduced.
4. Thus all large Provincial areas may be maintained as closely as possible in a wilderness state.
5. Let us keep "Adventure" with its inherent danger in the large wilderness areas. This means to me :-
 - a) Keep Hydro-free zones. Why must this utility force its way into remote areas when some metro areas are short of power? This utility is a direct "aid" to pollution.
 - b) There is a tendency, when large groups start using an area, to insist on too many safety regulations. Instead of being well prepared we insist instead on life jackets for all (necessary in cold and rapids but rather useless when not worn in hot summer weather). The next regulation will be radio communication, a doctor on call, ambulance and aircraft on alert for every group using the wilderness.
 - c) Soon the adventure and the risk will be gone from the environment. Therefore we race dune buggies, jiggers, mini bikes, cars, scooters, snowmobiles etc in our search for adventure!

Re : Logging

Why not? It is quite compatible with a wilderness adventure, but, --
NOT HEAVY MECHANIZED LOGGING!

- 1) Why can we not winter log? The same men could be employed in sawmills or guides in summer.
- 2) Why couldn't the Department of Lands and Forests supply and maintain the logging camp during the summer months?
- 3) Why can't we have logging with horse, chain saw (or even axe)? Why not subsidize this kind of logging? It will give work for many and provide an occupation for hundreds more in the field of recreation.
- 4) Why can't I take boys on a snow shoe venture and visit logging camps as they used to be?
- 5) Would it not be possible to operate winter logging camps designed primarily as a real "living" experience for teenagers? The Department of Lands and Forests operate Junior Ranger Camps in Summer. Why not winter camps?
- 6) Why can't we have snowshoe trails throughout large areas with protective shelters maintained by Department of Lands and Forests?
- 7) It would be a wonderful experience for the members of a canoe trip to visit a logging camp and be shown the operation during the slack summer season. These same campers might like to sleep in bunks one night of their trip, eat a logger's breakfast or even feed and exercise the horses, clean the stable.
- 8) A Logging camp would be an ideal stopover for tripping on horseback. Taking groups riding and camping is big business for some locations in the United States.
- 9) Of course the answer to many of my questions is lack of money. Fees that are charged for tripping in the wilderness areas will amount to a greater percentage of income in the future. The money put into Rochdale or an equal amount could be very effective in providing a worthwhile youth program in our wilderness areas.
- 10) The Department of Lands and Forests has underestimated its value in the educational field. Don't let the Boards of Education take over all Outdoor Education! The "dead weight" of administrators might spoil this activity as they did the classroom. The education of youth is the business of all organizations!

B R I E F

re

QUETICO PROVINCIAL PARK

presented to the

" QUETICO ADVISORY COMMITTEE "

by

" C. Q. D. "

[CITIZENS FOR QUETICO'S DEFENSE]

-- A GROUP OF CONCERNED ATIKOKAN CITIZENS --

BOX 5

ATIKOKAN , ONTARIO

A BRIEF

re

QUETICO PROVINCIAL PARK

Presented to: The Quetico Advisory Committee
(chairman, Mr. S. G. Hancock)

By: "C.Q.D." (Citizens for Quetico's Defense)
A group of concerned Atikokan citizens.
Address: P.O. Box 85
Atikokan, Ontario

SUMMARY

We believe that Quetico Park, in its entirety, and its present boundaries, should be free of commercial exploitation of any kind, and should be reclassified as "Primitive Park" under the terms of the Department of Lands and Forests' "Classification of Provincial Parks in Ontario" (1967).

Our reasons for this stand, as well as our more detailed recommendations, are set forth below.

"Primitive Park" - DEFINITION AND PURPOSE

The Department of Lands and Forests "Classification of Provincial Parks in Ontario" describes a "Primitive Park" as one:

- (a) having a large area (in excess of 25,000 acres)
- (b) whose natural features render it highly suitable for wilderness (ie. non-mechanized) travel or other "low intensity" recreational activities.
- (c) whose natural features may make it of value for scientific study
- (d) where no exploitation of natural resources is permitted
- (e) where mechanized equipment and vehicles are allowed only for area protection and other emergency uses
- (f) where development (if any) is confined to trails, portages, and designated campsites
- (g) where road access may be provided up to (or near) the perimeter, but may not penetrate into the park proper.

This same document says of the "Primitive Parks" classification, that its establishment "gives recognition to the increasing demand for outdoor recreation in a wilderness or semi-wilderness environment". It outlines the purpose of a primitive park as follows: (our emphasis)

- (a) "to set aside areas of natural landscapes for posterity"
- (b) "to provide an opportunity to enrich and expand the outdoor knowledge and recreation experience in natural wild conditions"
- (c) "to provide an outdoor laboratory for non-destructive scientific study"
- (d) to meet the "psychological need, of many people, to know that unspoiled wilderness areas exist"

We feel that these purposes, so well expressed, should be expanded to include the following:

(1) Natural Sanctuary

As technological man, we possess the power to control, manipulate, or destroy, all other living things on this planet - at will, or more often, not really by "will", but out of ignorance and indifference to the results of our actions. This great power gives us an equally great responsibility - that of protecting and preserving, at least to some degree, the living things that we threaten.

One of the prime purposes of a "Primitive Park" should be to provide a sanctuary where certain life forms, plant or animal, which are peculiarly sensitive to man's intrusions, may continue to thrive in their natural surroundings. The continued existence of these forms of life is of great value to man, not only aesthetically and psychologically, but in that each species is a unique and irreplaceable biological entity, future scientific knowledge of which may undoubtedly benefit us.

(2) Historical Values

In many areas most suitable for a Primitive Park, the intrinsic value of the natural landscape is enhanced by historical values. Quetico Park is a good example of such an area. Historic canoe routes passed through the park; numerous "artefacts" and other signs thereof still remain. And the area is renowned for its ancient Indian rock paintings. To paddle a "Voyageur" canoe route, under almost the same conditions and in nearly unaltered surroundings -- or to view artefacts in a museum. To see a rock painting from a canoe, as the Indian, perhaps a thousand years ago, viewed it, no sounds or sights of modern "civilization" intruding -- or to see the same from a "historic sites" parking lot. Can these ways of experiencing our history be compared?

(3) Preservation of Special Natural Features

All parks, "primitive" included, should be areas where things of unusual aesthetic value are preserved, for our enjoyment and inspiration, and protected from the commercial exploitation which is their usual fate. Our few remaining "giant" red and white pines are such things of beauty. "Overmature", a word that has meaning only in a strictly commercial sense, should have no place in a discussion of parks. Such trees are equally beautiful and valuable in the prime of life, in "old age", or after death.

(4) Scientific Value

The scientific value of a primitive park should be stressed. Here is a place where plant and animal communities characteristic of the area may be studied in their natural conditions, virtually unaffected by any human element. Such areas could, in the future, be particularly valuable in the field of forestry research. Only in such areas, untouched by modern logging or timber management methods, will we have a true "control" for the evaluation of the affects, good or bad, of our commercial forest management practices.

(5) Definition of "Wilderness"

"Wilderness" implies an area where there is, or has been, no significant human interference with the natural plant and animal communities, or any man-caused alteration of the landscape (e.g. as by mining, or roads). It implies the absence of any man-made structures (e.g. buildings, bridges), and above all, the absence of the noise and smell of machines. Man may pass through, but only in small numbers and by "natural" means (on foot or by paddle), without destroying the wilderness quality.

"Wilderness" does not mean just any unpopulated area. Forest land that has been clear-cut, or been subjected to other "management" practices, is not wilderness.

II. PRIMITIVE PARKS IN ONTARIO: WHERE, HOW MANY, HOW LARGE?

In the above - quoted document, ("Classification of Provincial Parks in Ontario"), the Department of Lands and Forests puts itself on record as recognizing the existence of important psychological, educational, recreational, and scientific needs in our society, that can be satisfied only by the establishment of a system of "Primitive Parks". In the four years since this document was published, what action has been taken?

Polar Bear Park, our only Primitive Park, was established. A very laudable step, but so easy . . . it contains no known commercially valuable resources. (Its boundaries were hastily altered when a mineral deposit was discovered within the original park).

We believe that Ontario needs a system of primitive parks, which should be carefully planned with the following considerations in mind:

(1) Areas Represented

The system should include at least one example of each of the broad natural regions that make up this province. Such a region could be described as a distinctive "amalgam" of geology, climate, vegetation, and animal life. Some examples could be:

- (a) pseudo - tundra -- (Polar Bear Park)
- (b) pre-cambrian lake country, with mixed pine and boreal forest -- (Quetico Park)
- (c) transition forest [southern hardwood/northern evergreen] -- (Algonquin Park)
- (d) northern spruce forest - and - muskeg ecology
- (e) Lake Superior shore, southern (S.S. Marie to Wawa, pine/boreal forest)
- (f) Lake Superior shore, northern (boreal forest, with unique arctic-type flora on exposed shores)

There would be others. Unfortunately, there is little wilderness left to preserve in the more southerly parts of the province.

(2) Accessibility

A significant portion of these parks should be located near enough to the province's population centres, and to roads, so that the "average" car-owning citizen can reach and use them in the course of his "average" 2-3 week vacation. (In contrast to the wealthy "fly-in" visitor to a park such as Polar Bear).

Unfortunately, the more southerly, accessible parts of Ontario's forest land are also the most attractive to the resource - extraction industries. Trees grow faster; transportation costs are lower; a work force is easier to attract and keep. These are the areas where our remaining wilderness is least and is being eradicated most quickly. The balance point in this conflict of interests must not be allowed to fall 100 % on the side of industry. The next few years will be crucial. Quetico Park is located in one of these coveted, accessible regions.

(3) Size

The minimum effective size for a primitive park would depend on many factors, including its intended primary purposes. All primitive parks need not give equal weight to all the purposes discussed earlier. However, any primitive park must be, relatively speaking, large. In an area set aside to preserve a natural ecosystem, the truly protected region will exist only inside the inevitable "buffer zone" along the boundary. Too small a park would be mostly buffer zone, with little truly primitive. If a park were intended to protect certain wide-ranging animal species (e.g., wolf, polar bear), an area much larger than the minimum would be required to accomodate their wanderings.

Some primitive parks, whose emphasis is wholly on the "sanctuary" and/or "scientific study" uses, might be near the minimum size. But parks for which any degree of wilderness recreational use were intended would have to be very much larger. The more human visitors envisioned, the larger the park would need to be to successfully accomodate them without destruction of its wilderness qualities. Quetico is so exceptional in its fine qualities for wilderness recreation, it should be one of our largest Primitive Parks.

IV.

QUETICO PARK: WHY IT SHOULD BE "PRIMITIVE"

Quetico possesses, to a truly remarkable degree, all the qualities that would make it a most fitting choice as a large, recreation-oriented, Primitive Park.

- (a) It represents a unique and most beautiful, natural region.
- (b) It is endowed with a dense, interconnecting network of lakes and rivers, making it ideally suited for true "wilderness" (ie. non-mechanized) travel, chiefly by canoe, but secondarily by hiking and snowshoeing.

- (c) Its great historic interest (Voyageur routes, rock paintings) has been noted. This is an aspect of our history ideally experienced through wilderness travel. A Primitive Park in this area would give people now, and for generations to come, the opportunity to truly "re-live" a part of this nation's past which is of great cultural significance.
- (d) It contains within its boundaries particular flora and fauna of unusual beauty and/or interest, that are, or may be in the future, threatened with extinction unless protected. Some examples are: the surviving "giant" red and white pines ("wolf trees" to the forester??); bald eagles; timber wolves; the wolverine (if the last has not already vanished from the Quetico region).
- (e) With its relatively southerly location, and its proximity to a main highway, it is one of the few accessible large areas of wilderness remaining in the province. Partly through luck, and partly due to its semi-protected status as a park, Quetico is more nearly in a "wilderness" state than is any other near-by area of a comparable size.
- (f) The Ontario government has, over the years, consistently advertised Quetico Park to the public as "one of the last great primitive areas on the continent", as an area that "is regarded primarily as a wilderness park, for wilderness recreation, and is protected against any disturbance which might cause the deterioration and destruction of the wilderness environment." It was only in the last few years that members of the public became aware, many with a bitter sense of betrayal, that the Department of Lands and Forests had quietly planned, and permitted to be carried out, a large - scale, highly mechanized logging operation within the park. Since they promised us Quetico, for so many years, as "primitive" and "a wilderness", apparently feeling that the public wanted it thus, it could be argued that the government now has an obligation to make it such in fact.

Certain arguments are frequently put forward against classifying Quetico Park as "Primitive".

1. "It is unfair to those who, through physical infirmity, or lack of desire to undertake "primitive" travel, would be denied access to the unique attractions of the Park, unless roads were developed within it."

Of what "unique" experiences are such people deprived?

Roads and cars would destroy Quetico's wilderness quality, for everyone.

The very limited canoeing experience possible for (or desired by) the individuals in question, is readily available in the surrounding country outside the park.

Indian rock paintings exist outside the park, some quite close to present roads (e.g. Agawa Bay).

As for historic canoe routes, Quetico Park of course contains only a short segment of these long routes. Outside the park, they are reached, paralleled, or crossed by roads in many places. However, people show considerably less interest in them once their "wilderness" flavor has been destroyed by proximity to a highway or town.

A park such as Quetico contains certain special natural features whose value does not depend upon a wilderness environment. Such features should be preserved, as well, outside the park, in numerous, small, readily accessible areas . . . near highways, campsites, etc. Any remaining, accessible stands or individual specimens of giant pine should be protected in this way. Unusual local geological features, plant communities, archaeological features, etc., should be protected wherever they occur, outside of large Parks, and made easily available to the car-driving public, for their enjoyment and education.

2. "It is unfair to enthusiasts of motor-boating, water-skiing, or snow-mobiling, to exclude mechanized recreational activities from the Park. Those who prefer wilderness-type recreation are in a minority."

It could be said of many, many facilities in our society, generally agreed to be essential for the public welfare, that they are used only by a "minority" of the population. Museums, art galleries, theatres and symphonies; psychiatrists and ambulances; night schools and "educational" T.V. programs; ball parks, stadiums, swimming pools and ice rinks. Only a minority of the population makes significant use of any one of these things in their lifetime. Does this mean that those who need or desire them should be deprived of them? A significant and steadily growing "minority" in this country want and need true wilderness environments where they can find healing respite from a mechanized, crowded, man-made environment. A short period of living and travelling in an unaltered natural setting, in relative solitude, out of sound, sight and smell of machines, can do more for the mental health of many people than a year on a psychiatrist's couch, . . . and it is less "expensive" to society as well.

Americans have become acutely aware of the value of wilderness only after most of their own has been destroyed. Witness in what numbers they flock to parks, such as Algonquin or Quetico, in search of it. The fact that 95 % of Quetico Park users are American should warn us to have more foresight than they did.

Look at a map of northwestern Ontario. Virtually all of it has a great abundance of lakes and rivers. What a tiny part of it Quetico is! Everywhere in this vast and magnificently watered area, motor-boats, snow-mobiles, airplanes and automobiles may go at will. Is the "majority" who choose to use these machines so selfish that it can now allow the "minority" even such a small area as Quetico where they may pursue their idea of recreation? Even in the immediate vicinity of Quetico the list of accessible boating waters is almost endless. Northern Light and Saganaga; Lac des Mille Lacs; Marmion; Clearwater; White Otter; and Rainy Lake are only some of the largest. Highway No. 11 is bordered on both sides by numerous large and small lakes.

V. LOGGING AND SILVICULTURAL PRACTICES

The question of logging lies at the very heart of the controversy over parks policy in this province and in particular over the future of Quetico Park.

We seriously doubt whether modern mechanized logging can be justified in any park, let alone one intended to have some semblance of "wilderness".

(1) Effects of Clear - cut Logging

(a) Aesthetic:-

The most immediately visible effect of clear-cutting is, of course, the complete desolation wrought by it. With the complete removal or destruction of all trees as well as smaller shrubs, flowers, mosses, and lichens, goes the complete annihilation of all the aesthetic values associated with forest. But, they say, there is a 400 foot reserve along all lake and river shores. Unfortunately, a canoeist passing along the shore can often see right through those 400 feet of trees to the cleared area behind, unless a rise of ground should charitably block his view. Mr. Brunelle said (on C.B.C. radio) that no canoeist would ever walk more than 200 feet from a lakeshore because if he did he would get lost. Yet a Lands and Forests publication on Quetico instructs the canoeist to locate his privy at least 300 feet from the water. Let's hope not too many campers get lost on the way to the "privy" and stumble on that "invisible" cut-over area by mistake. And what of our psychological needs, admitted to by the department? Could it be that the knowledge that a cut-over area is just a few hundred feet away, confirmed by frequent glimpses, could be almost as detrimental to a true "wilderness" experience as having to walk through that area? What of possible future hiking trails? Will they be confined to lake shores because of the cut-over areas inland? It has been argued that the desolation is only temporary, since a new "crop" of trees will grow. Unfortunately it is just that, a "crop", and will be harvested again even before the trees have reached what would be considered a pleasing size. An area under "sustained yield" management would be aesthetically speaking, "a forest" for only a small fraction of each 70-100 year cycle, if at all. No trees would be allowed to reach anything near their full growth; for example, the "rotational age" for red pine is considered to be 100 years, whereas these trees would normally live to an age of about 300 years.

(b) Erosion and nutrient loss:-

Clear-cutting methods lead to a great deal of soil erosion, due to complete removal of ground cover and tearing up of the thin soil layer by the passage of heavy machinery and the bulldozing of debris. This erosion not only depletes the land, but ultimately pollutes park waterways. Experiments in the U.S. have shown, as well, that soil nutrient loss, in the increased water runoff, is extremely high from a cut-over area.

(2) Regeneration

Has the Department been able to show the Committee any research that indicates beyond any reasonable doubt, that effective regeneration will take place in cut-over areas of Quetico Park? Have they any research to prove that the amount of soil erosion, combined with nutrient loss through runoff and removal of logs is not sufficient to affect the ability of the Quetico area to support a healthy forest environment? A department official has admitted lack of basic research on these questions. We know areas in this province where one can drive for mile after mile, and see virtually nothing but the precambrian rock, bracken, blueberries, and a scrubby deciduous growth hardly worthy to be called trees. Can the Department show conclusively that such would never be the fate of any cut-over areas of Quetico?

Even assuming regeneration of trees to be completely successful, we find present silvicultural practices incompatible with Park values.

- (a) Scarification aids crop species to survive but is destructive to other species. How much it leads to soil erosion and leaching of soil nutrients is anyone's guess.
- (b) Application of 2, 4, 5, - T and other herbicides to large areas to kill off growth that competes with "crop" seedlings, as still practiced by the department, we find indefensible in a park laying claim to be a "natural environment" let alone a "wilderness". 2, 4, 5, - T's fetus-deforming effects were proven to be so much more potent than thalidomide's that the U.S. government banned its sale for domestic use. What are its effects on aquatic life, or forest animals, not to mention humans?
- (c) The aim of regeneration is to produce extensive even-aged stands of one or two commercially desirable species. The woods industry speaks glowingly of man-bred "super trees". The main feature of these "domesticated" crop trees would be rapid growth. Unfortunately man-bred crops are weaker and require special care. More pesticides, herbicides, fungicides, and fertilizers would be required to grow these trees . . . once again at the expense of the rest of the ecosystem, and to the detriment of any so-called "natural environment" or "wilderness". Logging interests like to tell us that "unmanaged" park forests are "reservoirs of decay and pestilence" that endanger their commercial tree crops. In fact, the reverse may be true.

(3) Use of Pesticides

In timber management circles, pesticides such as DDT's were thought to be both "economical" and "convenient" tools for controlling insect infestations such as spruce budworm. These chemicals have been sprayed massively, over huge areas, without regard to their potentially disastrous effects on the whole web of animal life. Only recently has their adverse effect upon the world environment been recognized. Such chemical tools have no place in a park if it is to be a natural ecosystem or a sanctuary for certain threatened bird species such as bald eagle, osprey, and other birds at the top of the food chain.

(4) Roads

Modern, highly mechanized logging operations seem to require all-weather gravel "highways" as well as a network of branch roads. Gravel tends to be bulldozed casually from any and every handy hillside. Portages are obliterated by road-building, bridges cross river canoe routes. The total result can truly be described as a "scar on the landscape", hardly in keeping with our idea of wilderness.

Unfortunately, these roads endanger far more than aesthetics. Roads have a way of becoming used by the public, regulations or no. Starting with company employees (not on business, that is) their friends and relatives, the abuse grows until the road is officially made public, in violation of the wilderness concept.

(5) "Multiple Use" Concept in Parks

"Multiple use of parks" equals "Commercial exploitation of parks". Why the euphemism? Are we trying to hide something? It is claimed that commercial logging operations are never allowed to conflict with so-called "primary" park uses (recreation etc.). As the preceding discussion has shown, there is, indeed, a very serious conflict. Commercial timber management is incompatible with good park management, and so-called "multiple use" must invariably result in the destruction of park values.

(6) "Economics" of Logging in Parks

Logging in Quetico, as in other parks, is defended by the argument that it is necessary to:

- (a) the health of our economy
- (b) the production of goods essential to our "way of life"

No one denies that our society requires a logging industry. We only deny that the logging industry requires Quetico or any other park. On the one hand, we hear from Queen's Park that we are an incomparably wealthy province, with unlimited potential for growth and development of more and more natural resources and industry. On the other hand, we hear that we are so impoverished, resource-wise, that it is necessary to log off our few area of parkland. The fact is, many forested areas of the province are being utilized below their potential, or not at all. The industry doesn't need logs from our parks. It is simply cheaper and more convenient to get them there.

It is then argued that some particular local economy, some specific number of jobs, depend on logging in the park in question. This argument has little basis in the case of Quetico. Of the 225, J. Mathieu Ltd., employees, less than half reside locally. (Sapawe - Atikokan area) Of the remainder most have their homes in Thunder Bay and Fort Frances. Moreover this work-force is only partly dependent on cutting in the park. . . . Jim Mathieu Ltd. operates also outside the Park. Lands and Forests does not deny that Jim Mathieu's Quetico Park limits could be replaced by other limits outside the Park. The solution seems so simple: move the Baptism Creek operations to new limits outside the park without any loss of jobs. The Atikokan area might or might not lose the Sapawe mill and local employees, but the effect of this loss would be marginal on the economy of this town. The Sapawe mill may close in any case . . . under direct questioning, an O. & M. official said his company could not guarantee the life of the Sapawe mill if they bought the J. Mathieu Ltd. operation from Domtar.

VI.

PARK MANAGEMENT - THE FOREST

If commercial timber management practices are to be rejected for Quetico Park, then what are the alternatives? We suggest that a good deal of basic research must be carried out in order to determine how best to preserve the area, on a perpetual basis, as a natural wilderness.

Fortunately, there is time; forest environments change very slowly in the absence of logging or other human interference. If routine fire protection were continued, the Quetico forests could easily be left to their own devices for many years, while necessary long-term research is carried out.

We suggest the following guidelines:

(1) Aims of Management

In the longer run, the aim of management should be to maintain the park forests in something akin to the "natural" state they enjoyed before the arrival of European man, at which time lightning - induced fires were the chief "managers", alongside disease, insects, and wind. A natural forest would be characterized by variety not all in stages of regrowth (as a commercial forest would be), nor all "mature" as an overprotected park might eventually become, but a complete "mosaic" of plant communities of all types and of all ages and stages of growth or decay - from young to so-called "over-mature".

Each forest type has its own aesthetic qualities and is favorable to particular animal species; no type should exist to the exclusion of others. Proponents of logging often argue that many animals are more abundant in cut over areas and regrowth, but disregard the fact that many equally interesting and valuable species can only survive well in mature forest areas.

Above all, the commercial values and considerations of traditional forest management should never be allowed to influence park management decisions.

(2) Management Methods

(a) Fire

Because most fires today are of human origin, much of the park could burn to the ground in short order, if all fires were allowed to run their course. However, research might show fire to be a most useful and "natural", tool for inducing regeneration:

- (i) by allowing selected lightning - started fires to run their course
- (ii) by intentionally starting fires in chosen areas.

(b) Disease and Insects

Research might indicate that "normal" infestations should be allowed to run their course undisturbed, in view of the fact that tree disease and insect infestation make way for regeneration and are an integral and essential part of any natural forest ecosystem. An exceptional instance such as the introduction of some foreign disease or insect to which a native tree species lacked all resistance, might demand unusual control measures.

To deal with such emergencies, natural controls (e.g. introduction of a natural insect predator) should be sought through continuing research. Chemical intervention should be avoided at all costs. Pesticides poison and alter the natural ecosystems. It has been found that the targets of pesticide use frequently develop resistance to these chemicals, even while their natural insect (or bird) predators are wiped out. And other, pre-

viously controlled, insects can become pests since their predators are also killed off. As a result, the use of pesticides snowballs: ever-increasing quantities and/or constantly new varieties of chemicals result in similarly snowballing contamination of the environment. A Primitive Park, free of these chemicals, may become the only area for research into natural predator - prey relationships, and perhaps the only source of some beneficial natural predators.

(c) Cutting

Cutting of trees might be found to be a suitable method of inducing regeneration in some cases. Such cutting should under no circumstances necessitate the building of roads or use of heavy machinery. Logs cut could probably not be utilized commercially, unless they could be removed in a non-destructive manner (e.g. by horses, in winter). It might be found most desirable to leave cut trees lying where felled, similar to a natural windfall. Such cutting, (if any) should be done by park staff, not by a commercial logging concern.

(d) Chemical "tools"

Use of chemicals (e.g. insecticides, herbicides, fire suppressants) should be avoided entirely in a Primitive Park. Only in the most extreme circumstances, and after the most careful research, could their use even be considered. The development of natural biological controls, discussed above, should make use of pesticides unnecessary even in such "emergencies".

II

PARK MANAGEMENT: RECREATIONAL USE

Recreational activities within the park must be in harmony with the "wilderness" concept.

(1) Motors

Motors, of any kind, (outboards, snowmobiles, power saws, aircraft) should not be allowed anywhere in the park. The pollution (oil etc.) they cause would be detrimental to "primitive" park waters; the noise and air pollution they cause is incompatible with a sense of wilderness.

(a) Outboard Motors

In answer to pleas from "sportsmen" and others, who claim that Quetico wilderness is too difficult to reach without outboards, the Dept. of Lands and Forests appears to be on the verge of permitting outboard motors in all parts of the park except Hunter Island. We believe this would be a tragic mistake. With increasing use of outboards, the wilderness will become not more accessible, but less so, since where motors come, true wilderness ceases to exist. And the only proposed motor-free area, Hunter Island, is already becoming a "non-wilderness" due to a different threat, i.e. too many human visitors.

If motors were banned from all park waters, then a true wilderness atmosphere would extend right to the borders of the park, where at least a "semi-wilderness" experience would be easily accessible to those who lack the time or the physical strength to travel to the interior lakes. By this one gesture, the numbers of that much talked of "minority" who want and are able to experience wilderness surroundings, would be dramatically increased. Consider French Lake: from this point one can paddle westward, through Pickerel River, Pickerel Lake, and Pickerel Narrows, for a distance of over 25 miles, without a single portage, as well as southwards into Rawn Lake, and into numerous side-bays of the Pickerel system. It is one of the beauties of Quetico that it could offer us such a truly accessible wilderness canoe area, those who enjoy motor-boat travel more than paddling have all the rest of North-western Ontario open to them, including numerous large lakes just a few minutes drive from the park waters.

(b) Snowmobiles

The arguments against use of outboards apply equally to snowmobiles with the added factor of the snowmobiles' far greater potential for the harassment of wildlife, at a time of year when they are often physically weakened and generally "hard-pressed" to survive.

(c) Aircraft

No landing of aircraft should be permitted in the park interior, other than by park personnel for essential management, law enforcement, or emergency purposes. Overflights should be restricted in altitude (over 4,000 feet) as at present. The Department should consider whether it might be advisable to phase out public use of its airbases on park border waters (French, Beaverhouse, Lac la Croix, Basswood, Saganaga).

(2) Roads

There should be no roads within the park. Existing logging roads should have bridges removed, generally be made impassable, and possibly bulldozed or otherwise treated to hasten their growing - over. With the availability of aircraft, no roads should be required for fire-fighting or other management activities.

The French Lake access point, should be maintained, and other access points, such as Beaverhouse Lake, considered for development.

(3) Trails

Hiking trails should be established in some parts of the park. This activity is increasing in popularity in Ontario, as witnessed by interest in the Bruce Trail. For a start, the trail westward from French Lake, through the park, to emerge at Jim Lake and the junction of highways 11/11B could be completed. It can be readily appreciated that logging operations in the park, if continued, would make the establishment of any real network of trails impossible.

(4) Hunting

No hunting should be allowed.

5) Trapping

We believe trapping licences should be phased out gradually. For a Primitive Park, any kind of hunting or trapping constitutes an undesirable human interference in the natural system of population checks and balances. It contradicts, as well, the important "wildlife sanctuary" purpose of the park.

(6) Fishing

The above arguments against the taking of animals could logically be applied to fish. However, there is a strong tradition, throughout the U.S. and Canada, for permitting angling even in parks where all other forms of life are completely protected. Because of this, and because angling is a quiet activity, in keeping with a wilderness atmosphere, this sport should be permitted. There should be a continuing program to monitor the effects of angling on park waters, and if it is found that fish populations of some lakes are being threatened, or unduly altered, then angling should be restricted in those waters.

The prohibition against the use of live bait in Park waters should continue to be publicized and enforced.

(7) Facilities

In order to minimize the destructive effects of large numbers of campers along some of the more popular canoe routes, it may be desirable to provide a few simple facilities. These might include designated, cleared campsites, simple pit privies, and garbage burying sites. Provision might be made for alternating campsites, so that heavily used ones could periodically rest and recover for a number of years.

(8) Permanent Structures

No permanent or semi-permanent buildings, camps, or other structures should be allowed. Neither private individuals nor "outfitters" should be permitted to maintain any kind of permanent installations or facilities in the Park.

(9) Research Facilities

Any permanent research facilities, such as living quarters, laboratories, etc., if desired in the future, should not be allowed inside the Park, but should be located outside the boundaries close to a suitable access point.

(10) Visitor Numbers

It may, at some time in the future, become necessary to choose between restricting the number of visitors to the Park, or seeing many of the wilderness values, for which it was established, destroyed by sheer human numbers. Trampling and erosion of popular lakeshore areas; pollution from human waste and garbage; the loss of any sense of solitude: against these may have to be weighed the distastefulness of restricting the right of an individual citizen to enter the Park at will.

One possible (but "selfish"?) step that might solve the problem of numbers for some time to come, would be to cut off entry into the Park via the international boundary waters. This would considerably ease the burden on the Hunter Island area, which, because of its proximity to the U.S. border, is suffering already from overuse. This measure would also benefit Atikokan economically, since many Americans would then enter the Park via access points near the town.

(11) French Lake Campsite

We see two possibilities for the French Lake Campground, of which we favour the second.

- (a) Eliminate the campground, as incompatible with a Primitive Park, but maintain the area as a "jumping-off" point for canoe trippers.
- (b) Retain the campground as is (in a small non-primitive zone?), but allow only canoes (no outboards) on French Lake and connecting waters. Encourage use of this campground as a base from which to make day-length or short over-night canoe (or hiking) trips, within the French-Pickeral-Ravn system. Families or individuals, who for any reason can't or don't wish to undertake extended canoe travel, can thus enjoy some semblance of a wilderness experience.

An alternate campground should be established nearby, possibly on Eva Lake, where the motor-boating and water-skiing camper can do "his thing".

VIII.

MINING

No mining or mineral extraction of any kind should be allowed in the Park. Existing mineral claims or other "patented" areas should be bought back by the government.

IX.

THE NORTH-EAST SECTION OF THE PARK

The Minister of Lands and Forests is reported to have said:

- (a) that Hunter Island will be designated "primitive".
- (b) that the north-west quarter of the Park, formerly under volume agreement to the Ontario-Minnesota Pulp and Paper Co., will never be logged.

If this is true, then the controversy over logging centres on the 468 sq. mi. Douster limits in the north-eastern quarter of the Park. One gets the impression that the Department strongly favours continuation of the present logging agreement in that area. Indeed, they have suggested removing this area from the Park, and substituting for it another area adjacent to the south-east corner of the Park.

They justify the low esteem in which they hold this section of the Park, by statements that it is the least attractive section of the Park, that it has few lakes, that it is the least popular area with canoeists.

But many persons familiar with this area consider it, not the least, but one of the most beautiful and valuable in the Park. They cite, for example, the magnificent stands of old pine, the fine Indian rock paintings, and the towering cliffs, of McKenzie Lake. The Department's own map of Quetico Park "use pressures" shows that McKenzie Lake and Kawnipi Lake share the same user pressure as most of the central and southern Park, exceeded only by the most heavily used parts of Hunter Island.

Apart from its recreational value, we feel that this area is of great significance to the Park for two other reasons.

- (a) The entire area belongs to a watershed that drains, in a general south-westerly direction, into the more southerly Park waters. Extensive mechanized clear-cutting in this area could affect water levels, and water purity, in downstream regions of the Park. Erosion and high-nutrient run-off, a lowering of the water-storing capacity of the land, as well as chemical contamination by herbicides and/or pesticides could seriously affect water quality in the rest of the Park.

The area is said to be of high potential for mineral development, should it be removed from the Park. Any mining operations in this area would pose a serious water pollution threat to the rest of the Park.

- (b) This section of the Park, which has some extensive forest areas containing no large lakes or navigable rivers, is not for that reason less, but in fact more able to fulfill the important ecological and scientific purposes of a Primitive Park. The areas of the north-east which are not easily accessible by canoe, may become the only regions where certain man-shy, endangered species of wildlife may find refuge, — wolverines, for example, or some birds of prey. These areas could become, for scientific purposes, the only "true" wilderness areas in the Park, being the only ones truly unaffected by human activity.

For all these reasons, we believe it is essential that this region remain in the Park, and that logging be halted there immediately.

X.

A PARKS DEPARTMENT

The Ontario government should consider setting up a separate "Parks Department", to establish and administer a comprehensive system of parks in the province, guided not by commercial, but by aesthetic, ecological, recreational, educational, or scientific goals.

At the very least, the present "Parks Branch" in the Dept. of Lands and Forests, should be made much more independent of the dominant commercial forest management regime that so clearly holds sway there.

In the Dept. of Lands and Forests as now constituted, there is an irreconcilable conflict of interests, between the dominant commercial, managerial view of our forests and wildlife, and those non-commercial values that should, but clearly do not, govern parks policy. It is hard to conceive how a department so constituted could ever be trusted to protect the "best public interest" in respect to parks.

One small, but revealing, example of how the Dept. of Lands and Forests' collective mind works:

A few years ago, a well-known conservation group wrote to Mr. R. Brunelle, minister of Lands and Forests, seeking information on a proposed hydro line through the "Pukaskwa Wilderness Area" near Lake Superior. The following quotation is from Mr. Brunelle's reply:

"-- the line runs through a segment which is heavily timbered to commercially exploitable species which would, I believe, be more realistically deleted from the wilderness area."

The fact that the department allowed the line to cut across a supposedly

"wilderness area" is bad enough; apparently a few dollars saved by Ontario Hydro stand higher in Lands and Forests' scale of values than its own designated "wilderness areas". Remember the hydro line that, but for the protests of angered citizens, would have crossed Quetico Park below French Lake?

Even more telling is the implication that Lands and Forests, in establishing such wilderness areas, attempts to include only previously logged areas, from which the "commercially exploitable timber" has been removed. It calls such a policy "being realistic". It seems unable to recognize that the aesthetic and biological values of a mature stand of timber are just as "real" as its commercial value, and that it is the former values, not the latter, that parks are established to protect.

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We thank the Committee for the opportunity to present our views on the very important problem of Quetico Park.

C. Q. D.

Box 85

Atikokan, Ontario.

A BRIEF PRESENTATION TO THE ADVISORY COMMITTEE ON QUETICO PARK.

We feel that Quetico Park should be classified a Primitive Park. Our correspondence with Mr. Brunelle on this topic has emphasized that if Quetico Park is so classified, certain development constraints will be necessary. They are:

- (1) No resource extraction. We ask the Advisory Committee to recommend against the extraction of mineral or woods resources from any part of the Quetico. The Government should replace timber limits in Quetico with limits outside the Park, and new roads into such limits should be subsidized. This is in line with the viewpoint of our M.P.P. for Rainy River, Mr. Pat Reid.
- (2) No mechanized equipment should be allowed in the Quetico. The present law which excludes motor toboggans from the Park is a good one, and should be strictly enforced. Similarly, out-board motors should be banned from the Park.
- (3) There should be no developed areas in the Park. The French Lake campgrounds should be placed outside the Park boundaries by making the eastern end of Pickeral Lake the Quetico boundary, or by zoning French Lake outside the primitive area.
- (4) The building of roads into the Quetico is one of the most insidious means of disrupting this wilderness area; no public roads should be permitted into the area, and private roads should be closed as soon as the lumber companies have withdrawn. Of all the pressures brought to bear to defeat the wilderness quality of the Quetico, those brought by people in favour of roads into Quetico will be the most insistent in the next few years. Only a clear cut policy setting aside Quetico as a Primitive Park can preserve the essential wilderness qualities of this unique part of Ontario.

In a letter to us, the Minister of Lands and Forests said, ". . . wilderness preservation is considered of great importance and I would think that the proportion of the Park zoned as "primitive" would be at least as large as the area now preserved for this purpose - - about half of the 1750 square miles area of the park . . . " Many of us have canoed extensively in Quetico, and we know that this area of 1750 square miles is not very large. Half of this would be extremely small. Furthermore, a glance at the map will show that the whole of this unique area is an interrelated chain of lakes and portages, and it was for this very reason that the present boundaries of the Park were drawn. Tourist pressure is and will be tremendous in this area, and no area as small as 800 square miles can withstand this kind of pressure and retain its wilderness characteristics.

Indeed, having examined user densities in Quetico, the Advisory Committee should establish entrance quotas at the various entry points into the Park.

This period in our history seems to be a time when some people claim to know what is best for many other people. An issue like this one over the future of Quetico illustrates this kind of phenomenon. We believe there is room in Ontario for many varied conceptions of the use of our public lands. Commercial tourist areas, multiple use parklands, campgrounds, timber and mining claims, all of these are important parts of the public domain. These interests occupy all but a tiny portion of the land over which the Department of Lands and Forests has jurisdiction. We would hope that there is room in this huge province for two or three small areas which could deserve the "Wilderness" classification set up by the Ontario Government.

The basic question, as we see it, is whether or not our society can and will afford to set aside an area completely free from any commercial exploitation, whether that be resource extraction or tourism. We see the wilderness classification of Quetico being most desirable to achieve this end. It must be the Advisory Committee's difficult job to give leadership in this important matter.

Thank you for this opportunity of demonstrating our concern over a matter we think will be of critical importance to all of us in the years to come.

Respectfully submitted by the ^{following} Staff of the Atikokan High School, February 27, 1971. ^

Mr. W. W. W. W.
Minister,
Department of Lands and Forests,
Parliament Buildings,
Queen's Park,
Toronto, Ontario.

Dear Sir:

We have several copies of your policy on park classification, and have spent some time examining what is meant by the various classifications.

We feel that Quebec should be classified a Primitive Park. We summed up the "consequences" of such a classification, and we feel certain that these development constraints are necessary if this prime wilderness area is to be preserved.

With direct reference to your letter of October 29, and your statement of November 12, we reiterate our position as follows:

(1) We certainly feel there should be no resource extractions. We strongly urge the Government to declare a moratorium on logging in the Quebec until the Advisory Committee can bring us the recommendations on a basis that has been drawn up for the park. We think it would be unfortunate if the government were denied a free choice in this matter because of new commercial contracts, a situation which has placed Algonquin Park beyond real government control.

"No resource extractions" means no mining as well as no logging, and we would hope that the Government's Minister will stop firing trial balloons concerning mining in the Quebec.

(2) Motorized equipment should not be allowed in the park. The law excluding motor toboggans from parkages is a good one. This decision was politically easier to make than would be a law prohibiting outboard motors from Park waters because motor toboggans are relatively new. We urge the government will act courageously and keep all motorized equipment out of Quebec.

(3) There should be no formal developed areas in the park. The French Lake campgrounds should be placed outside the Park boundaries by making the eastern end of Victoria Lake the Quebec boundary, or by moving French Lake outside the primitive area. There is some precedent for moving Park boundaries, as evidenced by the movement of the Peter Lake Park boundaries recently.

(4) The building of roads into the Quebec is one of the most insidious means of disrupting this wilderness area. On any public premises, or on these roads, will be brought to bear on the logging companies and the government. The French and Boston roads says at one time closed, but at one public pressure (and extensive trespassing) forced them open. When this insidious course is the Quebec, little will be left of Quebec wilderness.

You have said, "wilderness preservation is considered of great importance and I would like that the proportion of the Park would be 'primitives' and be at least as large as the area now preserved for this purpose -- about half of the 1750 square miles area of the park....." Half of us have examined extensively in the Quebec, and we know that this area of 1750 square miles

is not very large. Half of this would be extremely small, so small that no use of any kind could be made of this area. Furthermore, a glance at the map will show that the whole of Quetico is an interrelated chain of lakes and portages, and it was for this very reason that the present boundaries of the Park were drawn. It would be a crippling blow to the preservation of this historically and naturally unique area if only half of it were to be preserved as wilderness.

Canoeing pressure on Quetico is now very heavy, so heavy that the Government if it is really serious about the preservation as a wilderness area, might be forced to restrict travel in this area and place a user quota on the Park.

The basic question, as we see it, is whether or not our society can and will afford to set aside an area completely free from any commercial exploitation. We see the wilderness classification of Quetico as being most desirable. It must be the Government's difficult job to give leadership in this matter.

Thank you for this opportunity of demonstrating our concern over a matter we think will be of critical importance to all of us in the years to come.

Martin Stinner
W. M. White

C. C. Thorp
Gordon W. Thomson

D. T. MacKay
Helene Polacsek

Allen H. Batho
Lyons A. Webb

W. H. Cassidy
H. M. Peterson

K. G. Powell
Alan Ken

John E. Sun
H. M. Peterson

John New Dall N. B.

T. Mayata David W. Ernst

Ivan Aragon D. A. Radle

Mary Shaw
J. B. Kuden
Marshall Mann

E. J. N. O'Brien

J. J. Burke
Bledwyn Williams
John E. Sun

L. A. Mann

Michael G. Lewis

James F. Purcell

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QUETICO PARK BRIEF

We wish to submit the following comments for the consideration of the Quetico Park Advisory Committee.

Much has been written concerning the priceless values in the historic wilderness of Quetico Park and the need to protect these from the exploitive pressures of the timber industry. Wilderness areas are, in many cases, less biologically productive, are more harsh in their physical site characteristics and therefore very susceptible to small amounts of use. In the past, the very fact that these areas were large and user numbers were small dispelled any fears of over-use. But, increasing urban populations and the quality of life in urban areas has led more and more people to the wilderness for recreation. This increased need and use of wilderness areas has created an untenable position with the forest industry.

With the growth of 'easy-access' camping in the last decade and the concomitant overcrowding, patrons who had previously found well spaced campsites turned to other alternatives, gravitating towards wilderness. It seems from all studies however, that wilderness camping is not compatible with logging. The very reason for wilderness camping is lost by the presence of logging operations. Even the knowledge of logging operations in a wilderness area destroys the wilderness concept for most people.

Today, Quetico Park is the centre for much controversy between the wilderness camper and preservationists, and the timber

industry. Although the Department of Lands and Forests, as managers of the Park, have recently announced that there is no longer a danger of logging in the northwest quarter of Quetico, there still remains 468 square miles of park in the northeast quarter that is under timber licence. To date, the Department of Lands and Forests has been dominated by the Timber Branch. Perhaps, because recreation pressures were so low, the dominant forestry policy was the correct one to follow. But the times have changed and the Department must recognize that part of their responsibility lies with the people of Ontario who want to make at least one reasonably accessible provincial park a primitive canoer's paradise.

Ontario needs a formal recognition of the preservation concept to balance the harvesting concept which has too long dominated our natural resource management philosophy in this province.

The forestry industry has no actual concept of wilderness as a philosophy. They view every forest system as a potential forest crop. If other uses can be accommodated, so much the better but this has not been their prime concern. This outlook is no longer acceptable for primitive or wilderness areas.

The recent Departmental re-organization which has established the position of Executive Director of Recreation gives an indication that recreation is to play a larger role in Departmental responsibilities but it is only public window dressing if the Timber Branch rules the show behind the scenes.

In the Quetico controversy, public pressure appears to be largely committed to reclassifying the park as "Primitive" as the only permanent solution to this problem. However, we feel that the present classification is more than adequate to protect the interests of the public provided a comprehensive master plan is produced and some policy changes are made in the park. If such did exist, it would ensure the basic environmental integrity of the values inherent in the park environment under its present classification

The Ingredients for a Master Plan

The first ingredient of a master plan is a definitive goals statement which specifies that Quetico Park's primary use is for recreation for the people of Ontario. Also, the primary recreational use of Quetico is for wilderness-type recreation, that is, canoe camping and its associated activity patterns.

With a goals statement in mind for Quetico Park, a decision will have to be made as to the user group or groups to be accommodated under the goals statement. Objectives will then have to be laid out to achieve these goals and one of these must certainly include a designation of specific areas within the park to accommodate each user group or groups.

After a goals and objectives statement has been framed, the formation of planning guidelines is in order. The basic components of planning guidelines include inventory, analysis,

zoning, physical resource management and user management.

It will be necessary to inventory the park to facilitate the delineation of specific user zones within the park. Furthermore, if park resource managers are to succeed in the future, they will require much more comprehensive data on the user groups in order to draft realistic management programs.

Within the classification of a "natural environment park", the primitive zone of Quetico could be enlarged beyond the present Hunter's Island to include perhaps 85 to 90 percent of the park. The remaining 10 to 15 percent of the park would act as a buffer and provide for present and future "easy-access" campers and access points for those travelling into the interior.

The Quetico debate between conservationists and the timber industry has polarized in the public eye around two extremes. The conservationist is characterized as a "true" or "pure" conservationist, wanting absolutely no intervention or manipulation of the environment by man. The forester has laid his case out by stating that his management techniques, which are pursued for the purpose of producing a commercial crop of trees, are enabling the perpetuation of the type of successional forest ecosystem that the wilderness recreator actually desires. Neither position is correct. A wilderness area (whether a park or a zone) has to be managed but not to the degree that the forestry industry would like. The very concept of setting aside primitive or wilderness recreation areas

for recreation use of the public must of necessity accept the need for management if the wilderness that is set aside is to be retained in the condition for which the park was established. The dynamic aspect of wilderness poses the problem of an area becoming other than what is desired in the goals statement. This necessitates the establishment of allowable limits on successional change and the introduction of appropriate management programs to this end.

The problem of trying to develop methodologies and programs of management to preserve the quality of an environment for which we have no specific, agreed upon criteria is well illustrated by the present controversy surrounding the management of not only Quetico but also Algonquin and Superior Provincial Parks.

In a wilderness ecosystem, the first management objective should be the determination of the carrying capacity of the ecosystem for use by man. This is vital if we are to preserve what we have protected by legislation.

Recreation carrying capacity is made up of at least these two components -- the physical and the perceptive. The physical or biological carrying capacity examines the ability of a site or area to sustain user levels without impairment of its productive capabilities. The perceptive carrying capacity examines the user's perception of the resource, its quality and whether it provides the experience desired at various use intensity levels. In essence, the perceptive carrying capacity measures the ability of the site and/or

area to sustain use without a deterioration or impairment of the potentially perceivable experience.

This leads us to a consideration of the number of people we can allow to use these areas. This also confronts us with certain questions that require urgent answers. How much change can we allow in the wilderness ecosystem? How much physical management and rehabilitation is desirable and possible with available technology, time, personnel and money?

If we are going to maintain the perceptive quality of our wilderness areas, we are going to have to place some spatial and temporal qualifications on user distribution and density. A certain minimum spacing, between campsites and along canoe routes, will have to be maintained if we are to retain the perceived wilderness image for our users.

For management, whether it is obvious or subtle, persuasive or authoritarian is necessary if these areas are to be preserved for future generations.

To achieve the formal recognition of preservation as a provincial goal and establish the kind of management policies we have outlined to ensure the maintenance of wilderness areas is not possible under the narrow interpretation of the multiple use philosophy as is practiced by the Department of Lands and Forests.

The concept of multiple use is a sound one on which to base resource management. The Department has failed to implement it in a

comprehensive manner. This comprehensiveness should include the consideration of exclusive recreation use zones within a multiple use recreation area, not just the concept of the multiple use of every zone. For if the multiple use concept cannot accomodate preservation as a basic objective, then the Department may very shortly find itself in the untenable position of being forced to turn over parks management to another, perhaps new, agency which can better serve the needs of the people.

In summation, we propose:

1. A comprehensive master plan be drawn up for Quetico Park which includes
 - (a) A specific statement on goals and objectives.
 - (b) A specific designation of user groups to be served.
 - (c) An inventory and analysis of the physical resource base and specific user groups.
2. A zoning framework which will designate at least 85 to 90 percent of Quetico Park as primitive zone. This should use a graduated scheme wherein a "true wilderness core" would be the least accessible, gravitating outwards into zones of "lesser wilderness".
3. Physical resource and user management based on the physical and perceptive carrying capacity of Quetico Park.
4. The Department of Lands and Forests take a thorough look at its interpretation of the multiple use concept with a view to broadening it to include preservation as has been carried out

by the United States Forest Service.

We therefore submit the above recommendations as a sound method for managing Quetico Provincial Park so that the people of Ontario will truly benefit from its existence.

Stephen H. Fuller,
c/o Leaside High School,
200 Hanna Road,
Toronto 17, Ontario.
February 22, 1971.

Mr. H. T. Thomson,
Secretary,
Quetico Advisory Committee,
Ontario Department of Lands and Forests,
Port Francis, Ontario.

Dear Sir:

The following is a brief, submitted because of concern over the future management of Quetico Park.

As a private citizen and a teacher of Biology, the preservation of our disappearing forests is a matter of grave importance to me. It is my conviction that such areas as Quetico Park are becoming increasingly important as sanctuaries for our already hard-pressed wildlife and no less importantly, as facilities for the education and enjoyment of our citizens, young and old alike.

Accordingly, I should like to state my views on several matters of concern in the future management of Quetico Park:

1. Therapeutic cutting in Quetico should be banned. The term "therapeutic cutting" is not defined and admits itself to a wide variety of interpretations which could lead, in fact, to the removal of forest growth in excess of that minimum required for "therapeutic" reasons. As you are probably aware, the semantics of the term are such that, without rigid definition, such an operation could (and probably would - from its nature being such as it is) be enlarged to embrace a large-scale logging operation. In addition, the roads necessary for such operations would further remove many acres of woodland, thus upsetting the ecology of the area even beyond "therapeutic cutting".
2. Further to the above, it is my contention that no roads should be constructed into the interior of the park for logging or any other purpose. Aside from the destruction of vast amounts of forest, traffic noise, dust and fumes would detract from the quiet enjoyment that is such an important and fragile attribute of a wilderness area.
3. The use of outboard motors should not be allowed. Again, the noise of the ubiquitous outboard motor is undesirable in a wilderness area.
4. It has been shown in newspaper and magazine articles, and in recent programmes on television (CFPO-TV, CBC-TV), that the use of snowmobiles can and does have a detrimental effect on the environment. Aside from the noise and fumes which accompany the operation of snowmobiles, the destruction of plants and animal habitats, and the garbage discarded by irresponsible snowmobile users are problems of ever-increasing concern and disgust, even as expressed by a concerned public, conservationists and government officials. The well-publicized case of the snowmobiles running down and killing a wolf on Lake Simcoe is a recent testimony to the incredible callousness and irresponsibility possible.

5. I feel most strongly that trapping should not be allowed in Quetico Park. The use of snowmobiles by trappers would lead much to the destruction of underbrush, game trails and such (see number 4, above). Also, the disruption of food webs by the trapping of vital members thereof could have incalculable effects on the ecology of the area.
6. The very designation of Quetico Park as a wilderness area suggests that the park should be allowed to exist in its natural state. The loss of trees due to the spruce budworm is, of course, regrettable, but Nature has a remarkable capacity of adjusting and compensating. The deleterious effects of the accumulation of pesticides need not be repeated here. Suffice it to say that such a technique as aerial spraying is possible with its fantastically wide-spread and unpredictable results is a process that is probably better forgotten.

Regrettably, I do not have the financial, scientific and other resources available to those individuals and corporations who would take from what I consider to be my right as a citizen of the Province and as a human being. As a consequence, my appeal has to be based, to a large extent, on what you may consider to be mainly emotional grounds. It would probably be out of order to ask, "Why don't the lumbering and mining interests leave alone to our little piece of Ontario? Why don't they go somewhere else?" Nevertheless, this is precisely the way I feel.

The advertisements ask, "Is there any place you'd rather be?" I submit, Mr. Thomson, that there is no place I'd rather be and that such facilities as Quetico Park help to make it such. Mine is a small voice, I realize, but please remember that in a democratic state, even the smallest voice has the right to be heard.

Thank you for your kind attention.

Yours truly,



Stephen H. Fuller, B.Sc.

BRIEF: QUETICO PROVINCIAL PARK


"WILD LANDSCAPE
AND PHOTOGRAPHERS"

Respectfully Submitted on
behalf of the 75 members of
the Club by:

February 25, 1971

Midland District Camera
Club,

Midland, Ontario


President


Secretary

Gentlemen we appreciate this opportunity to briefly present our views on the issue of Quetico Provincial Park.

INTRODUCTION

What value is a wilderness? To a photographer who captures the moods and designs of life through the critical lens of the camera its value is beyond monetary consideration. A wild landscape in a primeval and almost untouched state is a paradise to a nature or landscape photographer. If Quetico can be preserved in such a state it will not only benefit the photographer but all those who enjoy the outdoors through the lens of their own eye.

FOREST MANAGEMENT, AND ECONOMIC CONSIDERATIONS VERSUS INTANGIBLE AESTHETICS

First of all although some of the principles of forest management should apply to Quetico it is primarily a park and should be managed with that priority above all others. Whereas, an over mature tree is valueless to the forester it hosts a wealth of animal life to the nature photographer. Economics does not belong in parks because these areas were set aside for the enjoyment of the people not the benefit of the logging industry.

Intangible aesthetics should obviously prevail because that's what a park is all about. It should be a community of life apart from man's domination where the photographer can take pictures without worrying about electric wires or roads or buildings violating the natural scene. It should be a living museum of geological, ecological and biological phenomena that can be appreciated on its own. Man's burgeoning populations and advancing technology are making such areas rare and hence valuable.

Whether or not everyone in Ontario uses Quetico is not at issue. Many of us have never been to Quetico and many will never go, but such an area should be available should we choose to take advantage of it.

NORTHWESTERN ONTARIO ECONOMY

The most convincing argument for allowing Quetico to be logged is the issue of jobs. However, forest industry representatives admit that due to automation, transportation costs and the diminishing supply of timber the industry in northwestern Ontario will be forced to reduce its labour force by 50 to 70%. In the short run then logging of Quetico is only delaying the inevitable at the cost of a potentially great North American parkland.

WHAT WILL LOGGING DO?

Many support the view that logging is compatible with good land management practice. Admittedly some selective cutting may have to prevail in areas to prevent fire or disease. This could easily and most safely be done by government personnel who are not ruled by the profit motive.

A large scale logging operation requires heavy machinery, roads, buildings, sewage, garbage disposal, etc.. No matter how carefully done modern logging techniques demand tremendous environmental disruptions.

But the trees will grow back. In how many years. Geological studies of the soil of Quetico have revealed that it is quite thin and hence the time to regenerate a new forest would be unusually long. Also with such a thin layer of soil, erosion is a critical problem after the tree cover is removed.

Reforestation by Lands and Forests will not attempt to replace the make up of the original forest. They will replant red pine and jack pine. Good pulp logs, but the character of wilderness is lost with the loss of characteristic plants and along with it characteristic wildlife species.

CONCLUSION

As a group connected with the vast numbers of non-consumptive users of our wild resources, we ask that Quetico be saved. Quetico represents only 0.4% of the area of Ontario; if our economy depends on a piece of real estate that size we are in desperate economic trouble.

Where will future generations of photographers go to photograph wild-landscapes and wildlife if all our parks follow the fate of Algonquin's with 95% of it open to logging. There is a chance now to retrieve Quetico which once lost is lost forever.

We recommend that Quetico be reclassified as a Primitive Park which will save it as unspoiled wilderness.

A BRIEF CONCERNING THE MANAGEMENT OF
QUETICO PROVINCIAL PARK

The Parks Branch of the Ontario Department of Lands and Forests has stated that the first objective of their parks classification policy (1) is "to protect by explicit policy declaration outstanding areas of natural, cultural, historic and scientific significance for the recreational and educational use and enjoyment of present and future generations". This objective expresses wisdom, vision and commendable intentions.

The purpose of our brief is to examine critically both the applicability and the application of the above objective to Quetico Provincial Park.

Since it is specified that "outstanding areas" are to be protected, we clearly must ask the question, "Is Quetico Park an area of truly outstanding natural, cultural, historic or scientific significance?"

Quetico has been called "one of the last great primitive areas on the continent". This is surely the view of the thousands of visitors that are drawn each year to experience the wilderness environment of its interior regions. In 1969, over 29,000 of the 38,500 campers that used Quetico, travelled to the interior. Furthermore, the number of campers using Quetico has increased by more than 100% during the past decade. Not only the public considers the natural attributes of Quetico valuable and worth preserving, for in a recent publication of the Ontario Department of Lands and Forests (2) one reads "It is to be regarded as a wilderness park, to be reserved from any development which might destroy the wilderness environment".

Quetico Park encompasses features of outstanding cultural and historic significance to both the Indian and the white man. Indian rock paintings, for example, are present in remarkable numbers. Early white explorers, from Jacques De Noyon and la Verendrye to David Thompson and Simon Fraser, travelled its waterways, and the two major canoe routes of the northwest fur trade passed through it.

The park has a further legacy, namely the preservation, for the people of Ontario and Canada, of a rich and unique flora and fauna in an area that is large enough and sufficiently isolated to ensure that disturbance is minimal.

Because of the inroads that increased population and urbanization are making on the North, we are rapidly losing examples of our natural ecosystems, just as we are losing animal species. Quetico Park serves the very important function of a preserve for both Flora and Fauna, a preserve ensuring that some of our virgin ecosystems remain for ecological benefits to future generations, for the scientist to be able to undertake base-line studies to provide meaningful appraisals of the impact that man is actually having on his natural world, and simply for future generations to see and enjoy.

It is incorrect to suggest that preserves of this sort can be established elsewhere, where there is no pressure to develop specific resources. These sorts of areas are needed, and quickly, in many areas, but they could not replace Quetico. Quetico Park's geographical position makes it unique in that it lies not only in the Boreal Forest Region, but also in a region where many species belonging to the Northern Hardwoods segregate of the Eastern Deciduous Forest find their most northerly expression. Quetico lies in a zone of ecological transition, and this results in a much higher floristic and faunistic diversity than one would otherwise expect; such diversity multiplies the value of an ecological preserve many times over.

Such features can only be maintained if the preserve is large. For only in this way, by "dilution", can the impact of the canoeist or camper be kept sufficiently light not to imbalance the ecosystem.

Surely there can be no doubt that Quetico Park contains features of outstanding significance worthy of continued protection.

A second question to be asked is whether Quetico Park is indeed being managed in accordance with the objective considered at the outset.

We submit that the valuable natural, cultural, historic and scientific attributes of Quetico Park are being not only depreciated but are threatened with destruction if extractive industries are permitted to continue operating within the park boundaries. We submit that the granting of permission for the commercial logging operation that has been established in Quetico Park is in direct contravention of the principle that its unique values deserve protection, and is contrary to the promise that this particular park would be "regarded as a wilderness park to be reserved from any development which might destroy the wilderness environment" (2).

We respectfully urge, in conclusion, that the Government of the Province of Ontario bring logging operations to an immediate halt in Quetico Park, and suggest that this course of action will provide the greater good to the present and future citizens of Ontario and Canada.

Submitted by: Dr. G. M. Courtin
Dr. J. R. Morris

Department of Biology,
Laurentian University of Sudbury,
Sudbury, Ontario.

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1. Classification of Provincial Parks in Ontario. Parks Branch, Ontario Department of Lands and Forests. 1967.
2. Canoe Routes. Quetico Provincial Park. Parks Branch, Ontario Department of Lands and Forests. 1966.

To: Mr. H.T. Thompson, Secretary
Quetico Advisory Committee
Ontario Department of Lands and Forests
Fort Frances, Ontario

BRIEF: THE FUTURE MANAGEMENT OF QUETICO PROVINCIAL PARK
A SUMMARY OF FINDINGS AND RECOMMENDATIONS

Submitted by:

Mr. S. Davis BA, MBA
Mr. J.A. Jackson B ENG, MBA

Graduate School of Business Administration
The University of Western Ontario
London, Ontario
February 21, 1971

BACKGROUND

The following findings and recommendations are respectfully submitted to the Quetico Park Advisory Committee for consideration. Such findings and recommendations follow an independent study involving the collection, collation and analysis of opinions expressed by:

- Members of the Federal Cabinet
- Members of the Cabinet of the Province of Ontario
- Members of the Public Service of Ontario
- Representatives of the Timber Industries Directly Involved
- Representatives of Resource Industries
- Representatives of Conservation and Naturalist Groups
- Public Action Group Leaders
- Representatives of the Ontario and U.S. Field Journalist Press

FINDINGS

1. The future management of Quetico Provincial Park is a multi faceted issue. Any definitive policy, or the lack of a definitive policy, regarding the management of wilderness resources has Province wide ramifications of a precedent setting nature.

2. Precedent setting interests and concerns are perceived in at least four polarized group view points:

- a. The Provincial Government and the public administration are concerned with achieving an acceptable resolution of public-private interests regarding the use and preservation of wilderness resources.
- b. Resource industries, in this instance primarily timber using industries, are concerned with the effects that a vaguely defined wilderness management and preservation policy may impose upon their resource requirements. Specifically, unpredictable changes of public policy regarding wilderness management and preservation raises major concerns for industry long term planning, capital investment, and the valuation of rights and agreements regarding resource reserves.
- c. Public action groups basically perceive government, administrative and industry interfaces as serving to disfranchise the public at large. Particularly cited by these groups are the incongruencies of statistical and economic data, and the

reactionary nature of overall policy statements or policy interference centered on the specific issue of wilderness management and preservation. The magnitude and nature of the various civic action groups appear unique in current Ontario history, and appear directly correlated to general public unease generated by the broad pollution concerns currently activated.

- d. Institutional and professional naturalists and conservationists perceive the need for a fundamental reappraisal of current resource management philosophies. In particular primitive and wilderness preservation policies require conceptual and practical reassessment vis-à-vis the degree of human interface and degree of management technique application. As few end positions are postulated or defined by these professional organizations at this time there is a danger that the impact of their professional expertise may be underscored when discussing narrow specific issues such as the timber management aspect of the Quetico Park wilderness management and preservation issue.

3. Government and departmental personnel are aware of, and sympathetic to, the complexity of wilderness management and preservation policy requirements. In particular, the limitations of present value economic analysis, and the resource management techniques of the past two decades are recognized as being inadequate tools and organizational constraints with which to address resource preservation needs as presently outlined in the parks classification system.

4. There is wide spread concurrence between administrative, industrial, institutional, and public opinion that Public Advisory Committees are not an adequate mechanism with which to generate public information, provide the analysis, and to generate recommendations for public policy. Regardless of value judgements, it is significant that all vested interests regard such a mechanism as being focussed on short term viewpoints, and perceive the mechanism as suspect on the grounds of vested member interests, weighting and inability to generate comparative data. The role of such committees in exercising discretionary powers of government is not clear in the public eye, and as such serves to aggravate and polarize public action groups.

RECOMMENDATIONS

It is recommended to the Advisory Committee that they inform the Minister of Lands and Forests that:

1. A perceived sense of public disfranchisement exists regarding the resolution of wilderness and primitive park management and preservation of resources, and that
2. the alleviation of this perception poses organizational, informational, educational, and policy demands on the department, and on the government as a whole, to be met on an on going basis.

It is recommended that the Minister be encouraged to broadly publicize the complexity of primitive and wilderness management and preservation concepts; and that these concepts be differentiated from multi use parks management within the context of the present parks classification system.

It is recommended that the Minister be encouraged to develop an administrative mechanism and the staff expertise to specifically collate, analyse and present in a comparative form the economic, cultural, and social interests bearing on the management and preservation of primitive and wilderness resources.

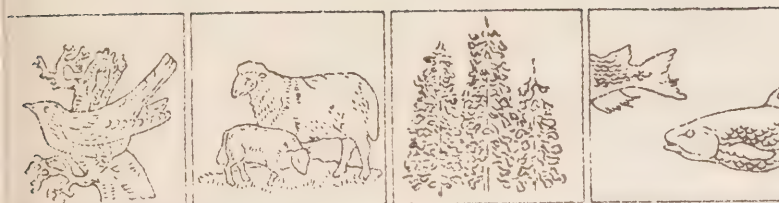
It is recommended that the Minister be encouraged to develop such a facility on an on going basis to address the conflict interests inherent in Provincial Parks Administration.

It is recommended that the Minister be encouraged to develop a "fees for service" model and test it publicly regarding the management of primitive and wilderness classified resources.

As Interim definitive policy it is recommended that the Minister be encouraged to:

1. Extend the moratorium to cover the exercise of timber rights, volume agreements and mineral rights to the total Quetico Park area until such time as a concept of primitive and wilderness classified resources management is formally derived.

2. Develop comparative economic data and statistics regarding alternative management techniques specifically related to the Quetico Park wilderness resources.
3. Relate the comparative data to the detailed implementation plans and programs derived in the "Plan For Development For Northwestern Ontario", as published by the Province of Ontario Government 1970.
4. Provide public dissemination of data and policy constraints regarding Quetico Park, and the management of primitive and wilderness resources in general.
5. Consider assistance in providing alternate equivalent resource access to the companies exercising or capable of exercising rights during the interim period. Such assistance might include direct economic as well as resource development assistance.



THE CONSERVATION COUNCIL OF ONTARIO Suite 604, 11 Adelaide St. West, Toronto 1, Ontario, Telephone 366-1387

February 26, 1971

The Chairman and Members
Quetico Park Advisory Committee
Ontario Department of Lands and Forests
Fort Frances, Ontario

Gentlemen:

Attached is a brief by the Conservation Council of Ontario on
Quetico Park.

The Council appreciates this opportunity to present its views to
you, and we hope you will give favourable consideration to the
proposals here presented.

Yours sincerely,

J.W.B. Sisam per CES.

Dean J. W. B. Sisam
President

Attach.



THE CONSERVATION COUNCIL OF ONTARIO Suite C04, 11 Adelaide St. West, Toronto 1, Ontario, Telephone 366-1387

A Brief Submitted by the
Conservation Council of Ontario
to the Advisory Committee on Quetico Park
March 1, 1971.

The Conservation Council of Ontario is composed of those major Provincial Associations that have an interest in resource use (Appendix 1). The Council's main aim is to encourage the wise use and management of the renewable natural resources of this Province. The use of our land resources, and the impact of today's rapidly growing recreational demands, are of particular concern to us.

The Council believes that there are two basic principles which must be considered in deciding on future management for Quetico Park. First, parks cannot be considered in the same terms as other areas of Crown Land. They are areas specifically set aside for the recreational and educational use of the people of Ontario. Second, the recreational values which each park provides must not be jeopardized by attempts to exploit the potential offered by other resources in the park.

There is growing recognition in the world today of the importance of wilderness, and of the need to preserve some areas relatively intact from extensive human disturbance. The validity of this position is well established; it is reflected in the Canadian National Park policy and in internationally established criteria. It is increasingly recognized by responsible parks administrators throughout the world as a legitimate role of parkland.

Classifying an area as "primitive" does not mean withdrawal from use. There

is a range of desirable recreational and scientific uses that are compatible with such a classification, and which indeed require such areas. The study of undisturbed natural communities and wildlife populations; and back country trail riding, hiking, and wilderness canoeing are some of these. These are appropriate uses for such parkland; and "primitive-type" recreation must be regarded as the prime use of wilderness parks.

At the same time it must be recognized that these areas are valued by many who never intend to take advantage of the recreational opportunities they offer. The recent description of wilderness as a "cultural heritage" is in this context wholly accurate. Older nations boast great and ancient buildings as their national treasures, and at the same time assume the enormous challenges and costs of maintaining and preserving these. North America necessarily lacks the monuments of an old civilization, but still has large tracts of superb landscape, relatively untouched by man. It is to these that Canadians have looked for identification and inspiration.

Ontario has no extensive National Parks even though it has within its boundaries areas of great National significance. In particular our vast area and relatively small and concentrated population provides the potential for establishing some of the world's finest wilderness parks. This is a rich Province, and efficiently administered, such parks could be provided with little sacrifice to the economy of Ontario or Canada. In the absence of significant National Parks in Ontario, the Province has a high responsibility to Canadians, and indeed to the world as a whole, to ensure suitable parks of this character are established.

There are different kinds of wilderness, from the mountain parks of the Rockies to the flat and isolated tundra of Cape Henrietta Maria, Ontario, for all its **variety**, has only a limited number of areas possessed of the diversity of features that would make a first-class wilderness park. Quetico is such an area. It has superb scenery, great historic significance, fine wilderness recreational qualities and interesting plant and animal communities.

Quetico is par-excellence a park which provides a wilderness canoeing experience for the recreational user. Its value in this respect is well established,

and indeed is the main emphasis in most of the Department's literature on the area. Wilderness canoeing requires large tracts of land. Its advocates include many whose experience would be marred by the impact of a modern logging operation, or indeed by the knowledge that such an operation exists in the area. Tempting though it is to propose a management policy for the Park that seeks to exploit the timber resources there, it must be recognized that conflicts have already arisen, and the condition will grow worse as recreational use expands. Quetico is a park; it is a park for wilderness recreation; and these considerations must dictate the policy adopted towards other kinds of resource use.

An approach that excludes commercial logging from the area is not inconsistent with a concept of multiple use. The Forestry Study Unit's (1966) statement on "Multiple Use of Forest and Related Lands" clearly recognizes the need for establishing an order of priority in multiple use decision making when it says that integration of uses must be planned "with due regard for their order of importance in the public interest on each management area." Wilderness recreation is also not inconsistent with maintaining a wilderness area, although it is recognized that recreational use must be controlled to prevent deterioration of the environment. Mankind has been an integral part of the ecosystem of north-western Ontario throughout its recent evolutionary history. The recreational uses are akin to the uses to which the ecosystem was subject by the Indians and by the early settlers, and do not present the prospect of wholesale changes to the environment.

In conclusion we would stress that management both for timber and for wilderness values are long-term propositions. The scars of logging do not heal rapidly, and an efficient modern logging operation will have a far more extensive impact on the environment than simply the area being logged each year; to some extent at least its impact will be cumulative. Meanwhile recreation demands will continue to increase and available wildlands near our southern Ontario urban centres will come under increasing pressure. Available leisure time and money will also continue to increase, providing Ontario's camping

public with both the incentive and the means to visit Quetico.

It is to these growing recreational needs that the recommendations in this brief are directed. It is in the light of these developments that the future of Quetico Park must be assessed.

Conclusions and Recommendations

Recommendation I. That Quetico Park be reclassified as a Primitive Park under the Ontario Parks Classification.

* * * * *

The present commercial forestry operations in Quetico are based on Government policies. The Companies involved are responsible corporate citizens and the conflicts between logging and recreation are primarily a product of the essential nature of the two enterprises being incompatible. It would be grossly unfair to create unemployment and financial loss as a result of change in Government policy, and it does appear that alternative sources of timber could be made available if suitable access facilities were provided.

Recommendation II. That Government assistance be provided to allow the necessary readjustments to occur to the best advantage of both the individuals and the companies in the region.

* * * * *

The Park presents a network of conditions: varied plant and animal communities; varied physiographic regions; areas of great historical and archeological significance; and varying degrees of isolation and accessibility. The range of management opportunities these present should be fully examined in the course of developing detailed plans for the Park.

Recommendation III. That thorough ecological and historical analyses be made and incorporated into the ongoing process of detailed management planning for the Park.

* * * * *

Quetico offers a unique laboratory for the large-scale study of the dynamics of natural ecosystems. To provide for protection of representative natural communities within the Park, ecological reserves should be set aside. These should exclude recreational uses such as fishing which have a serious impact on the interrelationships of the animals and plants of the area. Such reserves could be established on suitable natural units within the park, such as a watershed.

Recommendation IV. That representative natural communities within the Park be set aside as ecological reserves. These reserves could be based on natural features such as watersheds, and should exclude uses, such as fishing, which would significantly influence the ecology of the reserve.

* * * * *

At present the opportunity to encounter "wilderness" values is limited to those physically capable of and temperamentally inclined to canoeing. This could exclude others who value some of the same qualities, without providing an "intermediate" range of experience for them elsewhere.

Recommendation V. That the opportunities provided by the proximity of the highway at the north-eastern end of the Park be considered with a view to providing a limited amount of high quality wilderness camping and other accommodation on the periphery of the Park, for persons to obtain some contact with wilderness.

* * * * *

Under wholly natural conditions fire would interact with the forest to produce a diversity of forest types at different stages of succession. Lumbering does not replace fire ecologically, yet environmental management techniques are not widely understood, and the technology for techniques such as controlled burning appear capable of great development.

Recommendation VI. That the Department investigate further environmental management techniques, including controlled burning, with a view to the long-

term management of Quetico Park.

* * * * *

Recommendation VII. That there be established in the Parks Branch an Environmental Management Unit, which would develop management plans for the natural environment aspects of Ontario's Provincial Parks.

* * * * *

At present the wilderness recreationalist pays relatively little towards maintaining the quality of the resource he is using.

Recommendation VIII. That the scale of fees for wilderness canoeing in Quetico be reassessed.

* * * * *

THE CONSERVATION COUNCIL OF ONTARIO

MEMBER ORGANIZATIONS

(Appendix 1)

Algonquin Wildlands League
Canadian Institute of Forestry (Southern Ontario Section)
Committee of Conservation Authority Chairmen of Ontario
Community Planning Association of Canada (Ontario Division)
Consumers' Association of Canada (Ontario)
Federation of Ontario Cottagers Associations
Federations of Ontario Naturalists
Junior Farmers' Association of Ontario
National Campers' and Hikers' Association (Ontario Provincial Chapter)
Northern Ontario Tourist Outfitters Association
Ontario Association of Landscape Architects
Ontario Camping Association
Ontario Chamber of Commerce
Ontario Council of Commercial Fisheries
Ontario Educational Association
Ontario Federation of Agriculture
Ontario Federation of Anglers and Hunters Inc.
Ontario Federation of Labour
Ontario Forestry Association
Ontario Institute of Agrologists
Ontario Medical Association
Ontario Professional Foresters Association
Ontario Soil and Crop Improvement Association
Quetico Foundation
Soil Conservation Society of America (Ontario Chapter)
Town Planning Institute of Canada (Central Ontario Chapter)

February 19, 1971

Mr. R. T. Thomson
Secretary
Quetico Advisory Committee
Department of Lands and Forests
Fort Francis
Ontario, Canada

Dear Mr. Thomas;

I am writing on behalf of 36 people in the Naperville, Woodridge area. We have heard of the precarious position you are placing Quetico and in consequence the preservation of wildlife in North America. Needless to say, we are all very much concerned. It is a sad thing that so many of our wild creatures are faced with their terminating species, not to mention the problems this modern technical age produces. Our prime concern should be to avoid further threats to our natural parks and our wildlife while we find the solutions to pollution, ect. Not to make more difficult the survival of wildlife.

Although we are not Canadian citizens, many of us do enjoy the beautiful, natural areas of Canada. We trek, canoe, and relax amidst nature. We also want our children to have the same opportunities. This is going to be difficult if lumbering destroys what Nature has given us, and in turn, (even if in a small porportions) the habitat of wildlife. And anyone with any sense at all knows animals do not remain in areas where power saws and trucks invade.

We request the classification of Quetico be changed to Primitive, and remain so. If your intentions be honorable as you serve on this committee, you will request the same.

Yours truly,

Judy Frazier
Judy Frazier
Secretary
SYF Founders

603 Earl Street,
Kingston, Ontario.

February 25, 1971.

Mr. R.T. Thomson,
Secretary,
Quetico Advisory Committee,
Ontario Department of Lands and Forests,
FORT FRANCES, Ontario.

Dear Sir:

I wish to submit the enclosed brief to
the Quetico Advisory Committee on behalf of the
Kingston Field Naturalists, an organization founded
in 1949, with a current membership of more than 160
persons.

Yours sincerely,



Robert B. Stewart,
President,
Kingston Field Naturalists.

RBS*dr
Encl.

QUETICO: A PRIMITIVE PARK?

A brief submitted to the Quetico Advisory Committee by
the Kingston Field Naturalists

Despite its large size and relatively small population, Ontario contains few areas that have not been profoundly affected by man. The rapid increase in the rate at which Canada's natural resources are being depleted will, if it continues as it is almost certain to do, soon result in the complete disappearance of true wilderness. At the same time there is a growing public awareness of the fact that wilderness has an immeasurable psychological value to our stress-ridden society. The Kingston Field Naturalists would like to put on record that they consider that the preservation of areas such as Quetico Park as wilderness is a matter of utmost urgency.

In 1967 the establishment of the category "Primitive Park" led many people to believe that some existing and future provincial parks would be protected from the exploitation of natural resources. However, with the exception of Polar Bear Provincial Park, it would appear that we have been misled.

By the introduction of the "Primitive Park" concept we gather that the Ontario Department of Lands and Forests has come to realize either that wilderness areas are of value to the citizens of Ontario and elsewhere, as many other governments have already realized, or at least that the public would like such areas to be

established. The failure to implement such a policy, with the aforementioned exception - an isolated area with no timber of commercial value - suggests that there is conflict of interest within the department. It has long been our view that the management of forests and the management of parks are incompatible to a large extent and that they should come under the jurisdiction of separate government departments. If the people of Ontario are to have primitive parks to preserve representative natural areas as described in the 1967 policy statement (1), it would be difficult to argue that Quetico would not be an ideal example of unspoilt northern boreal forest. In addition to its natural features, its size and its proximity to populated areas, Quetico has unique historical associations.

Why, then, are we worried that Quetico might not be reclassified as a primitive park? The answer is that for too long now economic considerations seem to have been the overriding factor in many of the decisions made by the Ontario Department of Lands and Forests. Despite the powerful lobby from the pulp and paper industry we hope that those who make decisions in these matters will show us that they are willing to implement the policy of establishing wilderness areas in the case of Quetico Provincial Park. Logging to preserve the "quality" of forests may have been the code followed in the past, but we hope that there is to be a change of heart in the '70s. It is not sufficient to preserve certain areas of a park - around lakes, portages and trails. Multiple use has led to misuse on too many occasions. Wilderness areas are unique and irreplaceable.

Ontario's parks, we are told (1) are "dedicated to the people of Ontario.... for their healthful enjoyment and education." If this is so, then the people of Ontario should decide the future of their parks, not the industries of the United States and Canada. They are not using parks for their healthful enjoyment or education. It is time the forest industry was made to realize that many individuals in our consumer society would rather see natural forest than ever-increasing amounts of newspaper and garbage. It is perhaps relevant to mention here that the pulp and paper industry continues to be concerned with increasing efficiency, with a resultant reduction in the number of persons employed, and quality rather than the re-cycling of waste. In a preview of the industry in the '70s (2) no mention was made of any research into re-cycling technology.

In conclusion, we consider that the Government of Ontario would be doing a grave disservice to the present and future populations of this province if it did not set aside Quetico Provincial Park as a Primitive Park. If action is not taken now while there is the opportunity, no wilderness areas will remain in the forests of Ontario and the quality of life in Ontario will be subsequently diminished. To many there would be nowhere we would rather be if heed were taken of Thoreau's statement that

"In Wildness is the Preservation of the World."

References

1. "Classification of Provincial Parks in Ontario" - booklet issued by Parks Branch, Ontario Department of Lands and Forests, May 1, 1967.
2. J.A. Joss, Assistant Manager, Technical Section, Canadian Pulp and Paper Association in "Chemistry in Canada", May, 1970, p. 42.

25 February, 1971
Kingston Field Naturalists,
Box 831,
Kingston, Ontario.

204 N. Franklin St.

Thunder Bay 'F', Ont.

February 25, 1971.

BRIEF

respectfully submitted to
Mr. R.T. Thompson, secretary,
Quetico Advisory Committee.

Why must Quetico Park be preserved as a Primitive Park? Basically because it is too valuable to the present and future citizens of Ontario and Canada in that state to risk its being changed. The wealthiest province in the Dominion of Canada has by 1971 reached a state of civilized sophistication when it recognizes values other than those of short-term economics alone. We are supporting more art galleries, libraries, and live theatre than in the past; we are preserving more historic buildings and expanding existing museums, and enjoying the amazing Science Centre near Toronto. We need no longer feel inferior because of our lack of culture and our preoccupation with making money. The quality of our life is becoming recognized as important to us now and in the future.

Quetico Park is uniquely suited to become an increasingly valuable natural and historical museum. It is large enough so that if it is left alone, it can continue to regenerate itself in natural patterns unless, of course, we allow the area around it to become grossly polluted or allow dams to be built that will interfere with the natural drainage patterns of the region. Historically it is unique, holding within its borders remnants of early Indians' cultures in the burial grounds at McKenzie Lake as well as some very fine pictographs.

BRIEF continued

with the burial grounds. Here care will have to be taken to leave the area as it was, after the examination of artifacts and the drawings and measurements have been taken. Other less serious students of history may simply enjoy paddling through the region, happy in the knowledge that it is intimately related to our past, and pleased to be able to relive, vicariously, a bit of history. This is the appeal that Upper Canada Village has for so many people of all ages. The recent upsurge of interest in Canadiana is evidence that we have reached a stage in our growth when we are ready to cherish our past. But preserving pottery jars and pine furniture is infinitely easier than to preserve a whole landscape built up of a fantastic complex of inter-related units- of rock and soil, of drainage patterns, of micro-organisms and fungi, of lichens and mosses, of plants and trees, of the animal and bird life as well. Here, interference with one area can result in appalling damage in another apparently unrelated area. We have learned this in our experience with DDT. Please, let us do our learning outside of the Park, lest we unwittingly destroy that which we and our children cherish. The forest has lived and regenerated itself on its own in the past. Here is a remarkable opportunity to study how it does it in an area large enough for such study to have some validity. Cutting and reforestation are really a kind of farming, and reforested areas are not wild areas at all. They certainly have their place in a country so dependent on the forest- no one will deny that. But surely we can afford one small region where we do not farm the land, where we can learn and enjoy wild nature. This is a big country; we are rich in space compared with the rest of the world.

continued

Its waters were the canoe routes of the voyageurs who carried on the fur trade that started opening up the country to the white man. Aesthetically, it provides an abundance of natural beauty and silence that is becoming very rare indeed, just at the time when man is already feeling the need of such qualities to enable him to function in our noisy, machine-ridden world. And we must remember that the land we live in is not ours to do with as we will: we hold it for our short lives in stewardship for the generations that will follow us.

As a natural museum, Quetico encompasses a bewildering wealth of geological formations, of streams, rivers, bogs, swamps; of trees and shrubs, plants and mosses, insects, birds and animals. The Park has trees of both the Boreal Forest and of the Great Lakes-St. Lawrence Forest Regions, each with its own highly organized ecosystem to support it. While there is plenty of Boreal Forest in Canada, the stands of pine of the Great Lakes-St. Lawrence Forest are becoming rare. Travelling within the area, people, now and in the future, may study the inter-relationship of rock, soil, plant and animal life, noting how each part works with every other to make up the whole. And less serious students of ecology may simply be aware of and enjoy the rich variety of land forms and plant life, as so many people enjoy museums of more conventional types. It can provide a source of material for both serious scientific study or for casual enjoyment.

As an historical museum, the Park is equally valuable. Serious students of history may retrace the actual canoe routes of early travellers perhaps working from the actual records left us from the past. Archeologists may pursue their work with the pictographs, and if well supervised,

BR: continued

To speak of aesthetic values is to invite the scorn of the "practical" man. Yet there are values beyond the monetary ones: the existence of religions and philosophies, of art and music, of sculpture and poetry in every society be it primitive or civilized, is proof of that fact. Man cannot and has not lived by bread alone. His spirit must be fed. As our society becomes progressively more mechanized, man's need for silence, for natural beauty, for a place to pit his physical and spiritual strength against a natural force will become more and more vital. And again, we do not own this land. We hold it in trust for a pitifully short time while we are here. Do we have the moral right to deprive our children of these things that they as human beings will need? Have we a right to trade their birthright for a mess of pottage? In a recent article by the science writer Rene Dubos, these words caught my attention:

...Adaptation can also be dangerous for mental health. Man seems to be adapting to the ugliness of smoky skies, polluted streams, and anonymous buildings; to life without the fragrance of flowers, the song of birds, and other pleasurable stimuli from nature. This adaptation, however, is only superficial, and destructive in the long run.


Air, water, earth, fire, the subtle forces of the cosmos, the natural rhythms and diversity of life have shaped man's nature during the evolutionary past and have created deep-rooted sensual and emotional needs that cannot be eradicated. The impoverishment of sensual and emotional needs will progressively result in the atrophy of our

BRIEF concluded

iniquely human attributes. Like the giant Antaeus in the Greek legend, man loses his strength when he loses contact with the earth. *

Please leave us a little piece of natural earth for us and our children to maintain contact with- and remain human.

Joan Hebden



teacher, F.W.C.I., member of

Thunder Bay Field Naturalists' Club,

Federation of Ontario Naturalists,

Thunder Bay Historical Society,

Fort William Camera Club.

* Psychology Today, February 1971, pages 50-53

A BRIEF ADDRESSED TO:

THE QUETICO PARK ADVISORY COMMITTEE

FROM:

THE CANADIAN WHITE WATER AFFILIATION

THE ONTARIO CANOE ASSOCIATION, A DIVISION OF THE
CANADIAN CANOE ASSOCIATION

THE ONTARIO VOYAGEURS KAYAK CLUB

THE ONTARIO WILD WATER AFFILIATION

FEBRUARY 22, 1971

City dwellers have the same vested interest in the recreational use of Ontario's forested lands as do people in rural areas of the Province. People living in urban areas perhaps have a greater need for respite from the fast-paced life of our modern machine age. On weekends and during the summer months, urbanites head for places of outstanding natural heritage in Ontario -- the Niagara Escarpment, the Georgian Bay Region, Algonquin Park, Kilarney Park and Quetico Park,-- to name only a few.

We are concerned, therefore, over the repeated resource exploitation at the expense of our natural heritage parks. We especially fear that logging operations in Quetico Park seem to be following the same pattern set by the pollution of many of our waterways and destruction of ecological plant communities as has occurred in Algonquin Park.

Logging operations, whether they are carried on by Domtar, Jim Mathieu or the Ontario Minnesota Companies have resulted in 25 miles of logging roads in Quetico Park. Numerous sideroads bridge the French River, Baptism Creek, Cache River, Ferguson River and perhaps the Wawiag River in the near future. All these ^{SCENIC} waterways represent historic routes ¹ which have been or will be impaired by bridging. Logging operations have created unsightly slash piles posing a considerable fire hazard; in addition, they have destroyed unique ecological plant communities.

We are concerned that the Ontario Government has allowed logging firms to exploit no less than 868 square miles of the total area of 1750 square miles of Quetico Park. And we feel the situation stems from the failure of the Government to classify Quetico and other provincial parks as Primitive Areas, Class I ². Instead, Quetico and other parks are classed under Class III, Natural Environment Parks. This classification, paradoxically under Subsection C, contains a loop hole for natural resource exploitation under a multiple use clause which allows the commercial harvesting of timber.

We feel that commercial exploitation under this multiple use clause has no place in our provincial parks of outstanding natural heritage. Practically all forest land in this Province is already under commercial licence to industry. In comparison, Quetico and other forested provincial parks represent a very small percentage of forest land. Furthermore, at a public meeting last December, the Deputy Minister of the Department of Lands and Forests indicated only 50 percent of the annual permissible cut of timber is now being harvested. Considering these facts, we cannot understand why commercial logging is necessary in our provincial parks. Certainly, such parks should serve other than as timber licence areas for lumber companies.

Forested parks which form such a small proportion of all forest land in Ontario, should serve as recreational backyards for urban populations who produce a substantial part of the wealth in Ontario, and who care about maintaining primitive parks as a source of rich recreational enjoyment for their descendants. Within the sacred confines of provincial parks, therefore, the forestry concept of "Decadence of the Forest" or Lost Optimum Wood Value Per Acre" is lost on us. Many of the so-called decadent forests pose no immediate problem of deterioration. And since many of these forests could last for 50 or more years, and since many nourish unique ecological plant communities, there exists no reason to level these forests in Provincial parks at present.

We realize that the local populations near provincial parks need employment. But since the area under licence in Quetico is relatively small, logging here offers only a short term solution to employment problems. Cragg ⁴ states that pulp and paper companies are not going to solve problems of employment in forest regions in spite of their contribution to the economy as a whole. We believe it makes little sense to offer short term employment to 300 or more men, at the price of the destruction of 50 percent of Quetico's forested areas. We are concerned these logging operations will also set a dangerous precedent that could lead to the destruction of other natural heritage parks.

We believe a more logical solution would be to employ the 300 or so loggers as permanent park silviculture technicians to carry out prescribed forestry management programs -- burning operations to regenerate certain forest areas, or the application of shelterwood or group selection techniques for regeneration, employing horses rather than machines where possible. Costs of these operations would not be excessive as the Government of Ontario is responsible for the cost of regeneration of forested lands under the Crown Timber Act.

We urge that management procedures in our provincial parks come under the absolute control of the Ontario parks staff and that the parks be managed with the natural heritage purpose in mind. Failing this solution, we urge that Quetico Park should be administered by the National Parks Branch in Ottawa, a branch of the Federal Government, which we believe would treat Quetico Park in line with their strict timber regulations.⁵

Barry D. Brigley

Barry Brigley
President, The Canadian White Water Affiliation

Rev. R. M. Sleeth

Robert Sleeth
Acting Chairman, The Ontario Canoe Association

Steve Knappe

Steve Knappe
President, The Ontario Voyageurs Kayak Club

W. Bailey

William Bailey
President, The Ontario Wild Water Affiliation.

FOOTNOTES:

1. B. Littlejohn, Canadian Audubon Magazine , May/June 1970.
Pages 79 - 83.
2. Department of Lands and Forests, Classification of Provincial Parks in Ontario, 1967.
3. C.B. Cragg, Quetico Park and the Issue of Jobs, The Algonquin Wildlands League, 1970.
4. K.K. Neilsen, Chairman, Woodlands Section of the Canadian Pulp and Paper Association, Globe and Mail, March 19, 1969.
5. National Parks Act, National Parks Timber Regulations, amended, P.C. 1965-1853.

COPIES OF THIS BRIEF HAVE ALSO BEEN SENT TO:

The Honourable Jack Davis, Federal Minister of the
Department of Fisheries and Forestry, Ottawa.

The Honourable William Davis, Prime Minister Designate
of Ontario.

Robert F. Nixon, M.P.P., Leader of the Liberal Party of
Ontario.

Stephen Lewis, M.P.P. Leader of the New Democratic Party,
of Ontario

A BRIEF TO:

THE ADVISORY COMMITTEE

on

QUETICO PARK

FROM:

Workshop No. 6
Faculty of Environmental Studies
York University
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This paper is based on intensive research into the park over the past three months, plus on-site research.

The paper represents a synthesis of the information gathered and presented here in a series of diagrams. These represent what we feel to be the most important considerations in the formulation of overall policy for the park. We trust that they are self-explanatory in their exploration of possibilities for the park's future.

Paper's Contents: (1) Economic considerations
 (2) Biological considerations
 (3) Recreational considerations
 (4) Statement of position

Acknowledgements: G.H.U. Bayly, Deputy Minister, Department of Lands and Forests, for his co-operation in making available for us the records of the Department and giving us much of his time.
 J. Livingston, Faculty Advisor
 E. Marcus, Department of Lands and Forests - Fort Francis District, for his time and assistance in the park.
 A. Flemming, Vice-President and Manager, Woodlands Division of Domtar, for allowing us not only access to but also providing room and board in the Jim Mathieu operation, and
 C. Pochailo, Manager, Jim Mathieu operation, for being a good host and most helpful in our appraisal of the operation.

 There are many others in both the Department of Lands and Forests and the Companies concerned whose time and assistance we would also like to acknowledge.

ECONOMIC CONSIDERATIONS

CHART I.

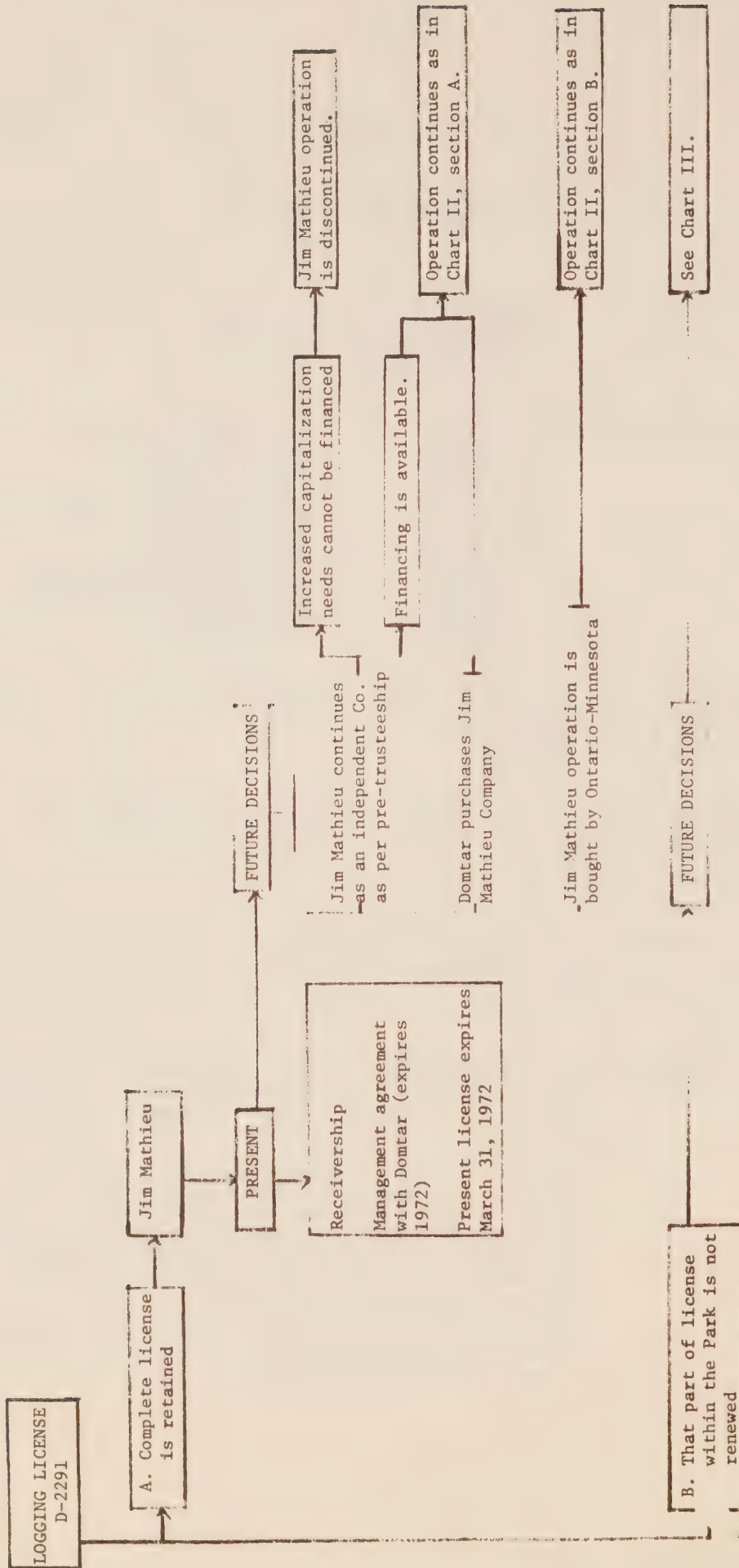


CHART II. LOGGING CONTINUES

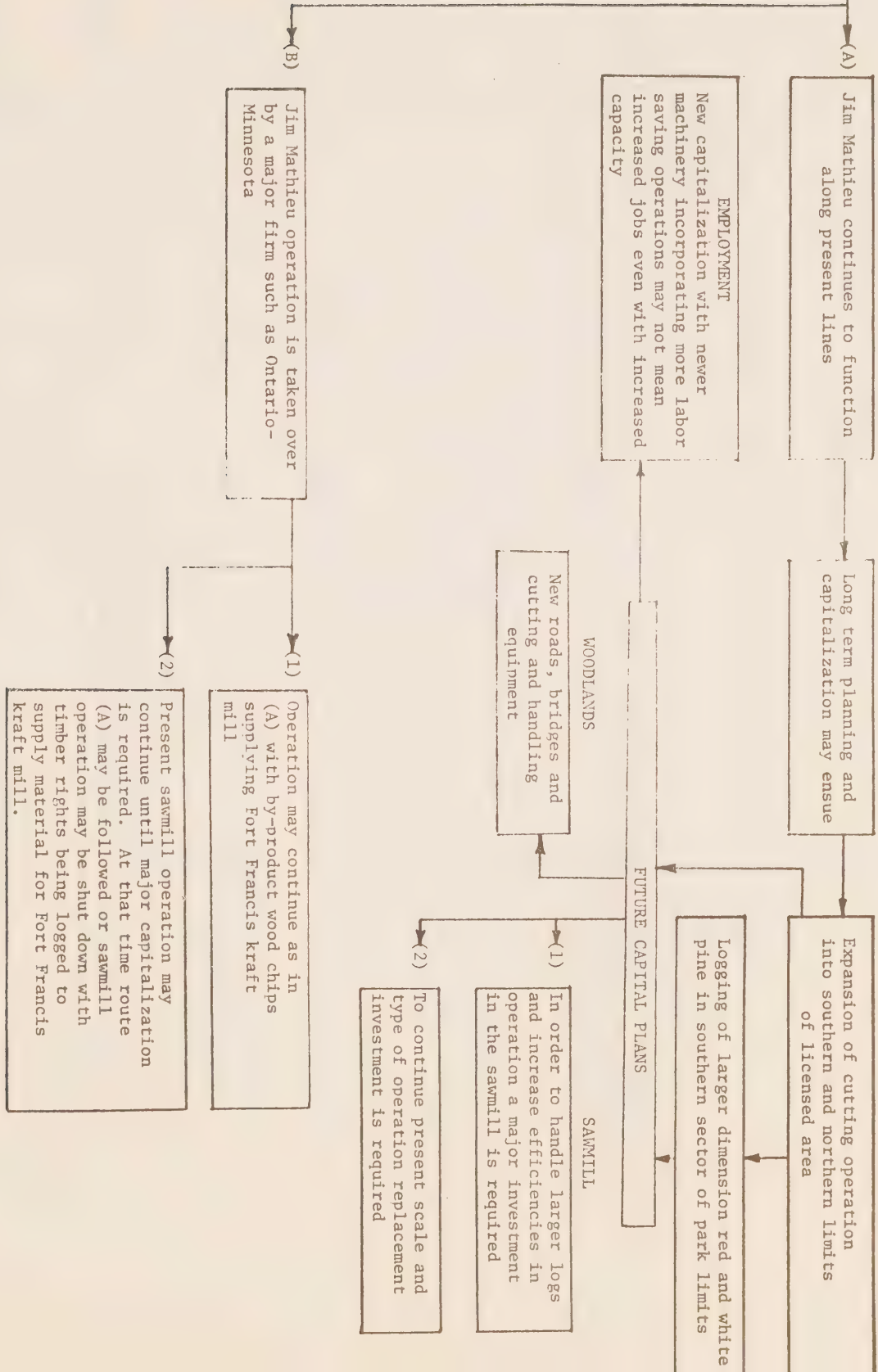


CHART III. IF LOGGING DOES NOT CONTINUE

(1)

Jim Mathieu is bought out by province

(2)

Jim Mathieu is permitted to continue logging in northern sector until that sector is logged out as a phasing-out operation. Financial compensation for loss of southern limits is given by provincial government.

This permits recapture of some capital costs invested in development of license

(3)

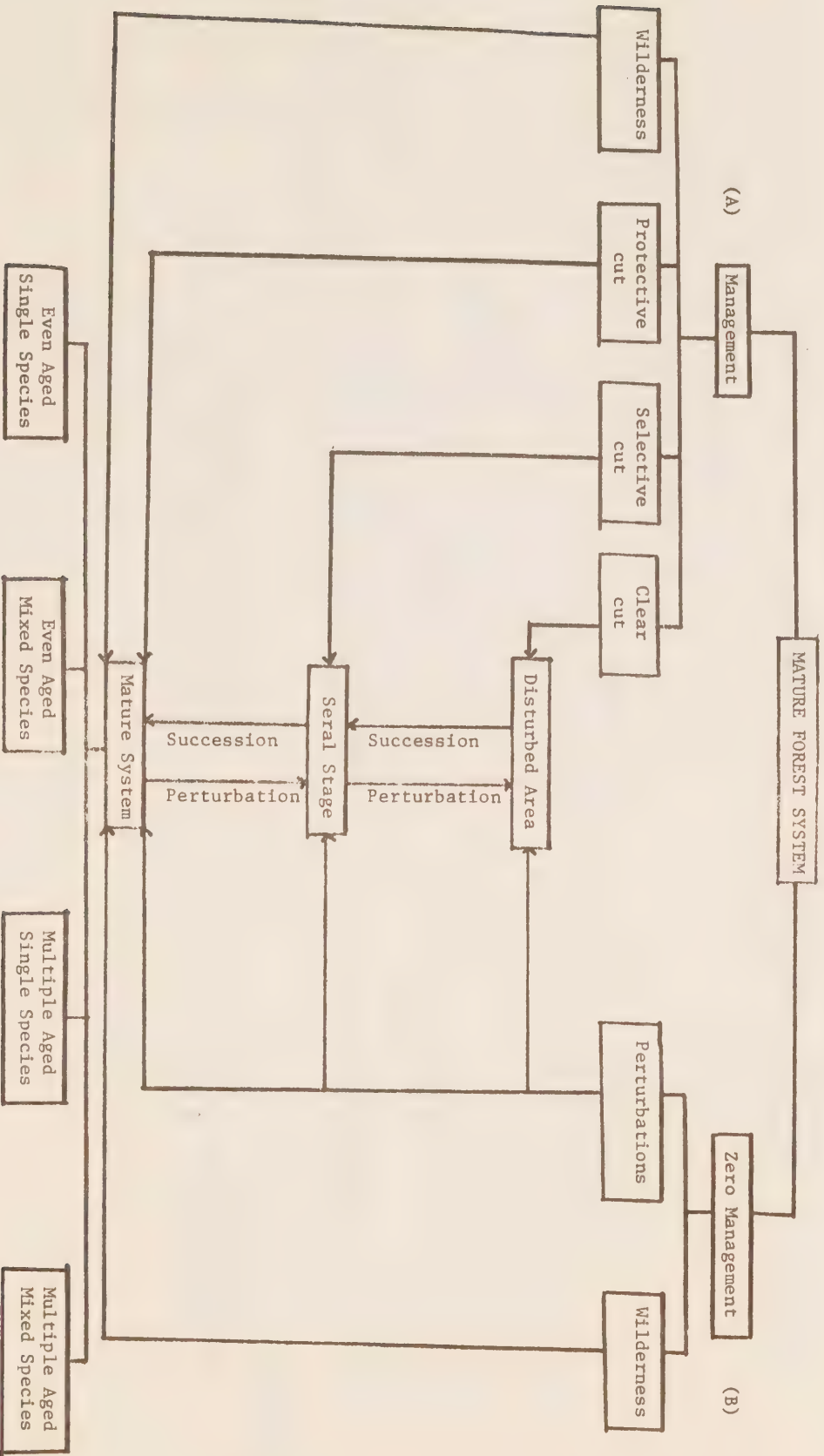
Rationalization of Timber licenses:

- Jim Mathieu is bought out by Ontario-Minnesota without that section of license within the Park
- Financial compensation for loss of park section is given to shareholders of Jim Mathieu
- In this case, Ontario-Minnesota acquires a sawmill plus a timber license adjacent to its present license and close to its main mill in Fort Francis.

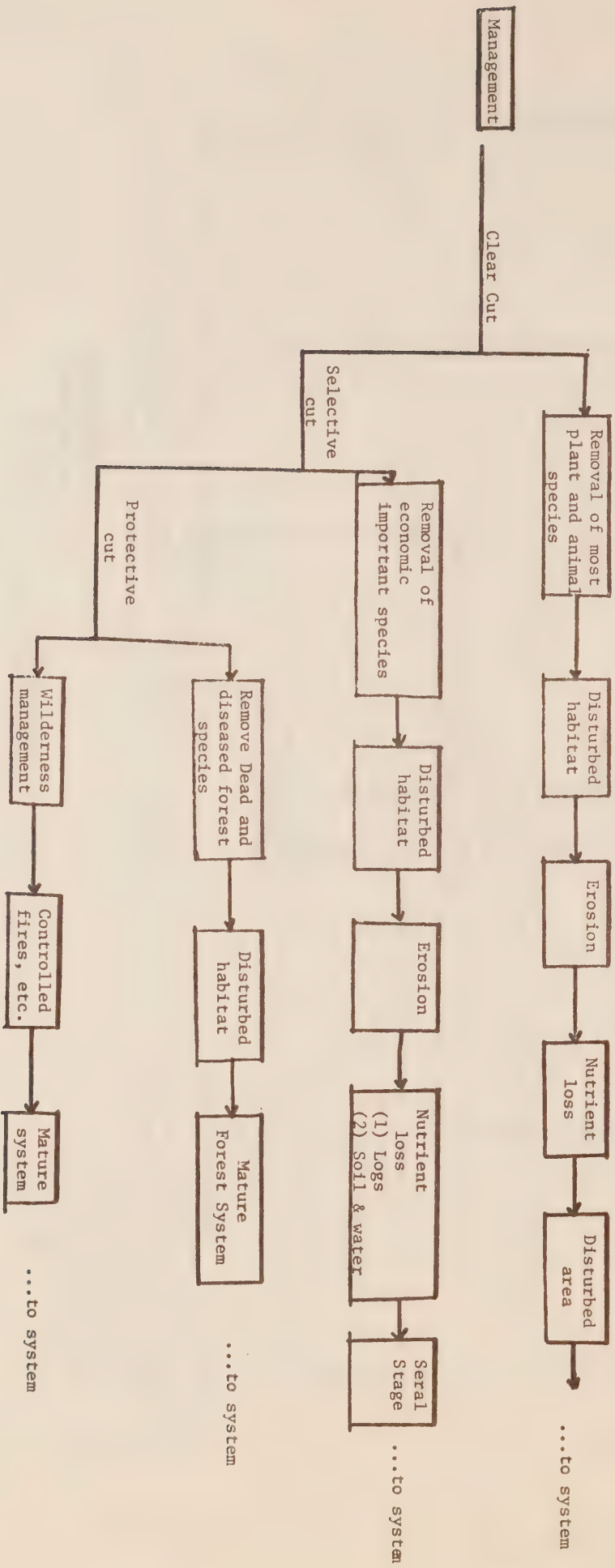
(4)

Additional timber limits of corresponding character to its license within park may be found outside of the park for Jim Mathieu to maintain its present operation of sawmill.

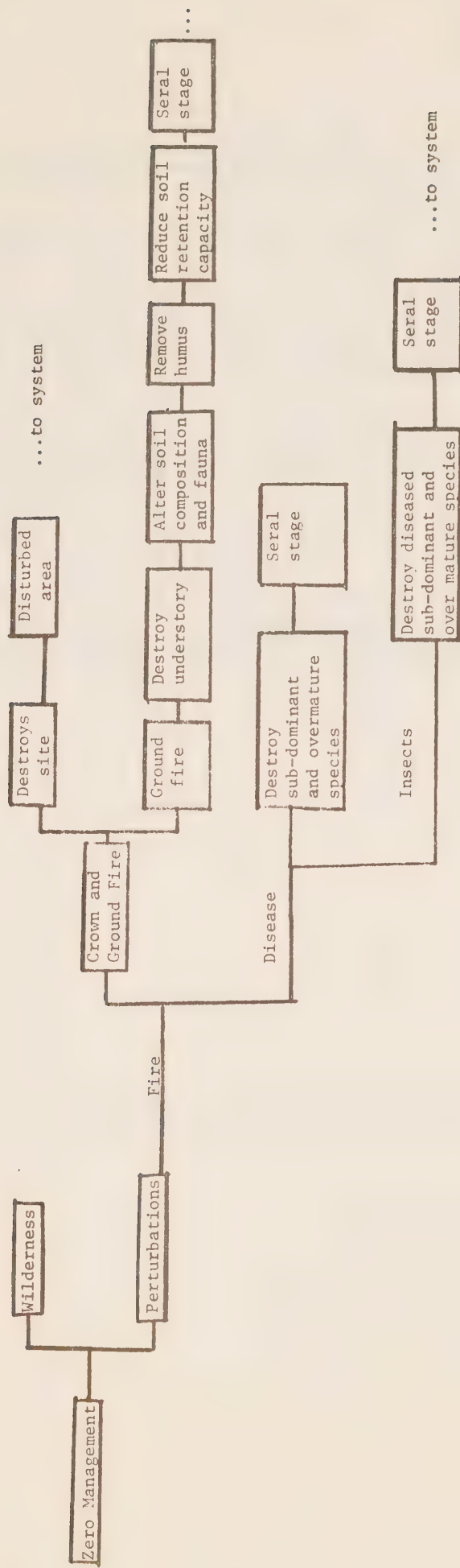
BIOLOGICAL CONSIDERATIONS



(A)



(B)



- The biological consequences of management or zero management in relation to Quetico Park are illustrated in a simplified form in the above flow charts.
- The management strategies form interacting processes with the natural cycle of succession.
- The processes and their effects have been greatly simplified to emphasize the relationship. However, the consequences of the management strategy and the resulting sequence within the successional cycle are correct.
- Also, the zero management perturbation effects have been divorced artificially from the management and wilderness cycles to indicate their own individual effects upon the vegetation. These perturbations should be considered to interact with each of the other cycles.
- It must be emphasized, however, that the probability of attack from any one of the perturbation agents is slight, due to the mixed species composition and age distribution of the forest in Quetico.
- Clearly, for a park which is described as "one of the last great primitive areas on the continent" the management strategy (whether management or zero management) should attempt to maintain the management cycle as close as possible to the mature forest ecosystem.

RECREATIONAL CONSIDERATIONS

The following considerations for recreation and other non-economic uses are based on two principles:

1. All renewable resources should be managed so as to be renewed.

A section of land may be a resource for several different uses which may or may not be compatible. To utilize a resource area for renewable timbering may mean that it is no longer renewable for certain recreational or scientific uses.

2. "Ontario accepts the definition of 'Park' as ...'an area set aside solely or primarily for public outdoor recreation by a competent administrative authority'".*

The three charts presented here show the implications of the possible courses of action arising out of these principles.

- I. If logging is allowed to continue in Quetico Park.
- II. If the Park is redefined to exclude area being logged.
- III. If logging is stopped within the present Park boundaries.

* Canadian Council of Resource Ministers, "Ontario", The Administration of Outdoor Recreation in Canada, Vol. I. (Montreal, 1968), p. 5.

I.

IF LOGGING IS
ALLOWED TO CON-
TINUE IN QUETICO
PARK

Logged areas
unsuitable for
recreation

•given enough time
a logged area will
revert to recreation
suitability

•can the time be
afforded?

Increased demand
for public rec-
reation

Increased
population

Increased %
urban popula-
tion

•city people want
open space more

Recreation types
demanded are
unpredictable for
land type and space
required

•flexibility of
provision requires
greater variety
and space of land

Higher pressure and less land
for public recreation

Decreased ability to provide
recreation types required

Possible loss of distinct ecological
areas

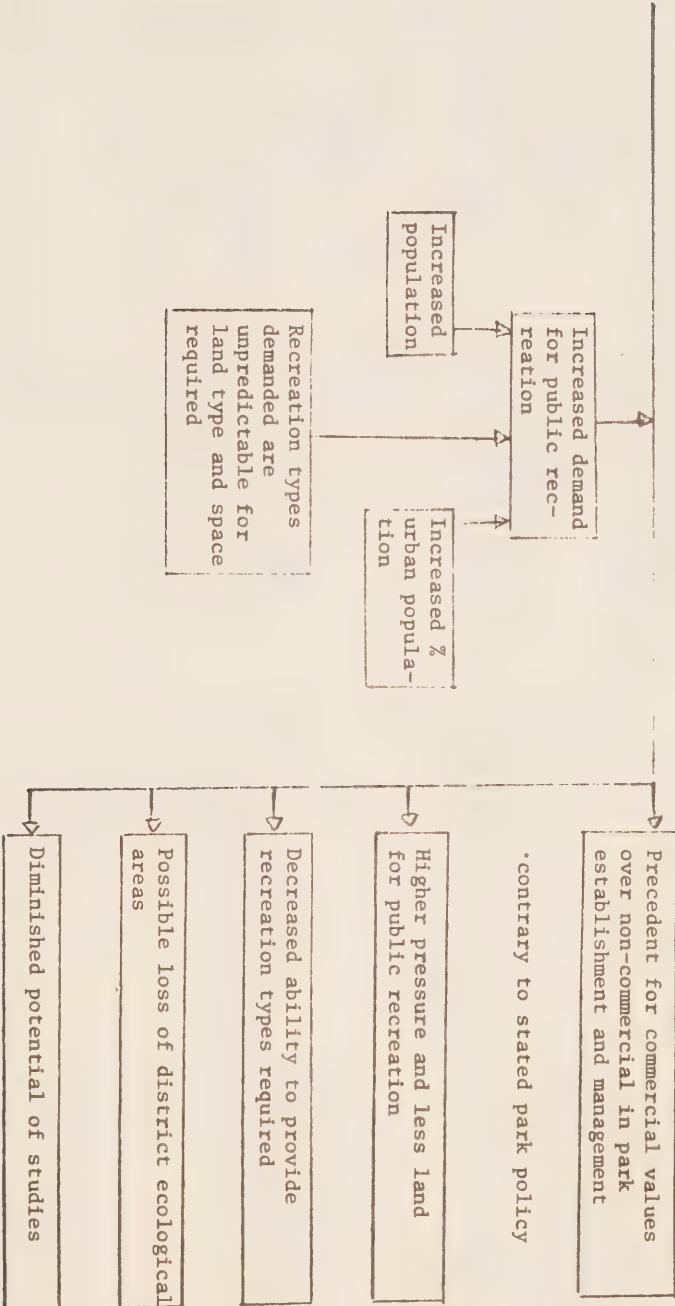
•loss to science and recreation

Diminished potential of studies

•studies of land capability, effects
of land use, available land types,
recreation demand

II.

IF PARK BOUNDARY IS
REDEFINED TO EXCLUDE
AREA BEING LOGGED

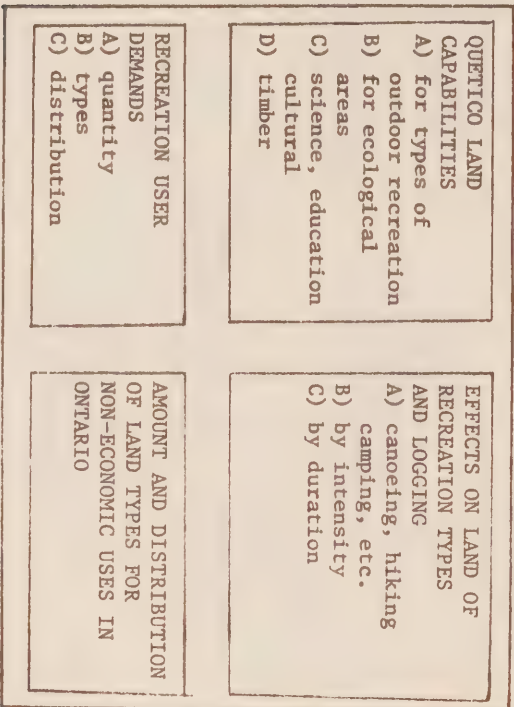


III.

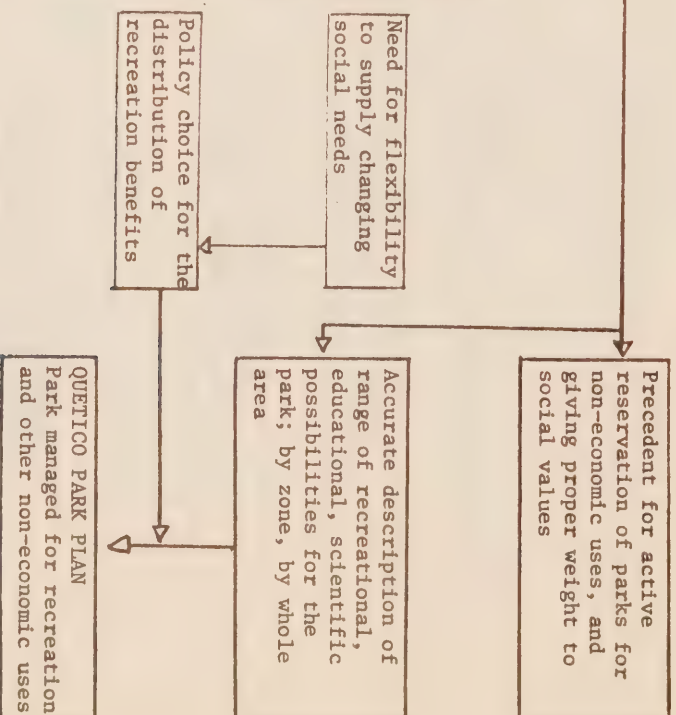
IF LOGGING IS
STOPPED WITHIN
THE PRESENT PARK
BOUNDARIES

STUDIES

- e.g., International Biological Programme
- e.g., Ontario Land Inventory, Forest Resources Inventory
- e.g., Lusty Report
- limited value because of changing demands



•these studies may indicate that some logging is permissible in the park, i.e., not detrimental to recreational uses



STATEMENT OF POSITION

RECOMMENDATION

The overlooking and overriding of social values in day-to-day decisions is understandable but unwise. The responsibility for implementing them lies largely with the Ontario Government in the issue of Quetico Park, as the government has the scope and power to see and put into effect a balance between economic and non-economic values.

ECONOMIC versus NON-ECONOMIC

•measureable \$
•multiplier effects
•prevailing work ethic

LOGGING
•short-term
•small operation relative
to the overall provincial
logging

•non-quantifiable values
•multiplier effect, \$-terms, weak
•increase time, increase leisure
demands
•leisure values unidentifiable

LEISURE
•long term
•growing

In this decision, we believe the government should favour the non-economic values for Quetico Park, setting a precedent for all parks in Ontario.

Mr. R. T. Thomson, Secretary,
Quetico Advisory Committee,
Ontario Lands and Forests,
Fort Frances, Ontario.

February 24, 1971.

Dear Sir:

In these days of increased concern for a deteriorating natural environment, the failure to classify Quetico as a primitive area shows that the present Government is out of step with the times and is unwilling to provide for the present and future recreational needs of Ontario residents.

The ruinous consequences of this decision will plague many generations. The immoral sacrifice of our natural heritage for money and political expediency is a crime against man and nature that should be stopped now.

While it is not reasonable to expect an end to environmental pollution overnight, there are few, if any, difficult questions to be resolved in deciding whether to permit industrial forestry operations to continue in Quetico. An unbelievably beautiful park rich in history and for the most part, untouched forests, lakes, and streams, is something that every Canadian can be proud of and can enjoy in the future. The growing population of this province alone (5000 people increase the population in Toronto every month) will need it and the thought of our children's children being deprived of such peace and tranquility is appalling and to put it mildly short-sighted on behalf of the government.

If the rape of this park is not stopped, a network of roads built almost to highway standards will be started, to cover eventually the entire 900 square-mile area under licence. This in turn will mean bridges over rivers and portages to carry trucks and all other

heavy paraphernalia of a modern logging operation. If these roads are allowed to penetrate much further, it will be too late for Quetico. The tourist pressure from the U. S. border will be too great then and where will our wilderness park be? Obviously there will be none. The next step of course, it will be open to motor boats and snowmobiles and then garbage and pollution will rapidly follow. Algonquin Park is a good comparison of what will happen to Quetico if the roads and boats and snowmobiles are permitted. Wilderness is both a resource in its own right and a distinctive environment which if used and managed properly, yields important cultural recreational and scientific benefits. But most of all and apart from these considerations, the most compelling reason for protecting and preserving wilderness is the conviction of a great many people that simply to do so is right - that we owe to ourselves and to the earth which is our home to leave at least some places like Quetico unaltered and unexploited.

Except for Polar Bear Park, an inaccessible 7000 square mile tract of tundra in from the Hudson and James Bay shorelines, Ontario has established no truly primitive area for use and enjoyment specifically as wilderness. The failure of Ontario to establish a major National Park, the only province not to have done so, is criminal, but to add to the crime is a profit making American interest involved to destroy in part the last chance of a wilderness area. The idea that the logging that has taken place on Domtar's limits has not caused desolation, is closing one's eyes to the truth. Logging today is a highly mechanized, year-round operation that cannot be carried on without major environmental disturbance. Lands and Forests staff has found, we understand, that Ontario-Minnesota Pulp and Paper Co. has sufficient wood available to feed

a new mill in Fort Frances without requiring any from the park.

The basic question is, should Quetico become the first reasonably accessible Primitive Park in Ontario? Resoundingly yes!

Scarboro Study Group,
Y.W.C.A.
St. Paul's United Church,
MacIntosh Ave.
Scarboro, Ontario.

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Margaret King *M. King*
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Meryl Clapp *M. Clapp*
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Jeanne Elliot *J. Elliot*
Eileen Studholme *E. Studholme*
Betty Davis *B. Davis*
Corinne Allan *C. Allan*

BRIEF

BRIEF

*Hope you will
include this brief
April 24th 1971*



POLLUTION PROBE AT GUELPH

Mr. R. T. Thomson,
Secretary,
Quetico Advisory Committee,
Ontario Dept. of Lands and Forests,
Fort Frances, Ontario.

BRIEF

February 24, 1971.

Dear Mr. Thomson:

I am a duly-appointed representative of POLLUTION PROBE AT GUELPH, which has a membership of over 150, a mailing list of over 400, and a city with many public and high school groups interested in the environment. I am also a member of the University of Toronto and the University of Guelph Outing Clubs comprising over 500 people very interested in outdoor activities. I have participated with the Biological Society here during my graduate work and also the Guelph Naturalist Club, both of which involve many people and both have an interest in the environment. WE ARE ALL WATCHING AND WAITING! WE ARE HOPING FOR ONCE THAT NATURE WILL BE PRESERVED FOR THE SAKE OF NATURE.

I will make an attempt to make this brief short and state that as the facts stand, we STRONGLY support the position taken by the Algonquin Wildlands League for reasons which I will mention soon.

In an article written by Rene Dubos, the noted Human Ecologist in the Oct/69 issue of Science Journal, he gives the quotation "We shape our buildings and, afterwards, our buildings shape us" from Winston Churchill. This is to explain that the planet Earth is the cage within which and against which man has developed in the past and continues to develop now. As the terrestrial environment deteriorates, so does the quality of man and so does his life. One can disagree with this or all the 'trouble' caused by anti-pollutionists but one should first read this article analytically as any scientist does and all other relevant articles.

The concept of GROWTH versus the QUALITY of life is being challenged by many economists (J.A. Wagar, Our widespread acceptance of unlimited growth is not suited to survival on a finite planet, Sci 168: 1179, 1970; The Economics of Environmental Quality by S. Rose, Assoc. Editor, Fortune magazine, Feb. 1970; The Economy Doesn't Need More People by JG Welles, Wall Street Journal, Apr. 22, 1970) and they like many other branches of science are beginning to realize that the eternal \$ is not everything, that more people will be needing natural untouched environments as the press of population further stresses them (Dubos, 1969; Pearson, 1970 in

Our Dwindling Resources a speech at the U. of Guelph, Oct 15/70), that Quetico may be far away from large population masses (I was by there twice last year and it's truly beautiful) BUT THE TIME HAS COME TO PUT THE INTERESTS OF PEOPLE AND THE ENVIRONMENT over the continual usual claims that logging is necessary, good and does no harm because these ideas are being seriously challenged and defeated. If you would take the time, as precious as it is, to read a book "Environmental Change: Focus on Ontario" by Dr. D. Elrick, Dept. Soils, U. of Guelph or many of the numerous articles in magazines, newspapers, Hansards, or scientific journals you will realize that one must be using foresight and listen to the wind of the times. Quetico is not a localized matter but it is an important possible turning point in a better parks policy.

We Canadians use our resources at 50 times the rate of people in the far east (Pearson, 1970) It is accepted that the world can only support 7 Billion people (Ehrlich, 1970, The Population Bomb).

At this rate of consumption of resources , especially the USA, most mineral resources such as oil, gas, coal, silver are being rapidly depleted (Dr. J.B.Sprague, personal communication, 1971; Ehrlich, P & A, Population, Resources and the Environment, 1970) and a crisis will be reached in as little as tne years.

BUCKMINSTER FULLER IS RIGHT WHEN HE STATES WE LIVE IN A FINITE SPACESHIP EARTH!!!

I HAVE BEEN ARGUING IN MORE GENERAL TERMS SPECIFICALLY TO ILLUSTRATE THAT THIS QUESTION OF RECLASSIFYING QUETICO AS A PRIMITIVE PARK IS VERY IMPORTANT BECAUSE IT IS TIME WE BEGAN TO MAKE THE FUNDAMENTAL CHANGES NECESSARY IN OUR ATTITUDES NECESSARY TO LIVE WITH, SAVE, AND APPRECIATE OUR FINITE EARTH.

Needless to say I am not aware of all the facts in the Quetico case but I will present several explicit points

- 1) there is and will be an increasing need for natural places for mankind to appreciate
- 2) there is a need for a more detailed and stricter comprehensive Parks classification scheme
- 3) there is no need for logging in this area, it is reported that logging here is subsidized by us, the taxpayers, and this makes it more distasteful
- 4) people employed by the logging industry are commonly relocated (Globe & Mail, Toronto) and this could be done.
- 5) it was stated by Dr D.H.Pimlott in the Globe & Mail that logging is not always the best process for a forest to undergo and a seminar was given on this topic at the Faculty of Forestry, U of T. It is also known that abuse of forests is common with logging companies. (Pimlott, Ontario Naturalist:report on Lake Superior Provincial Park, 1970)
- 6) In conclusion, I have tried to present my opinions as a scientist, possible resources planner and expert in outdoor education. Perhaps, you will consider them with due weight, perhaps not but the onus has been on me as a citizen to respond and I have. I have neither the resources nor the time of the companies to debate, to the extent that they will -- all I have is I vote or about a 1000 or two, depending on how you look at it but you must realize for your sakes and ours that we will not give, that this is a valid movement and that valid concepts and ideas have presented to be examined. I KNOW you will do so.

SUPPORT YOUR ECOSYSTEM !!

Truly,

Charles Anderson
Charles Anderson, Co-ordinator Pollution Probe at Guelph.

QUETICO: Let -it- be!

A BRIEF RESPECTFULLY SUBMITTED TO THE
QUETICO ADVISORY COMMITTEE

by

THE CITIZEN'S COMMITTEE TO PREVENT DESTRUCTION OF QUETICO

CO-CHAIRMEN: ETHEL TEITELBAUM, GERALD CAPLAN,
MAXWELL BRUCE, Q.C.

FEBRUARY 23, 1971

GENTLEMEN:

It is the purpose of this brief, presented by the executive and many supporters of Prevent Destruction of Quetico, a citizen's committee concerned with the future of Quetico Provincial Park to attempt to elucidate the spiritual and symbolic values of this unique wilderness area. And to argue that these values, however intangible and immeasurable, outweigh whatever short-term economic advantages commercial logging in the park may offer.

Stated simply it seems to us that in a province as rich in natural and industrial resources as Ontario that we can well afford to set aside .02% of the total provincial area as a wilderness sanctuary and preserve it against commercial exploitation.

We have experienced during the past four months since the Quetico issue has come to public attention a growing concern amongst the general population with the fate of Quetico. People from all walks of life and all political persuasions and all age groups see in Quetico a symbol of the struggle to save our environment from the abuse of commercial exploitation, pollution, loss of wilderness and recreational parklands and endangered wildlife species. The feeling is that if Quetico can't be saved against the short-term interests of the logging companies involved then the odds

of winning the larger, more complex, and economically expensive battles to save the environment are slim indeed.

The significant thing may well be that many people, although not primarily conservationists, or canoeist-campers are nonetheless deeply attached to the idea of wilderness. They feel a strong bondship with Quetico that seems to be based on a need to know that there are places where the ancient web of life has been preserved, and our ultimate dependence on nature has been honoured and enshrined as a sacred trust. For unless we are capable of such preservation and protection of unique areas of our environment such as Quetico, then the odds of our survival - against the continued onslaught against our environment - seems in doubt.

In consideration of the concern of this growing number of citizens, uneasy about the fate of Quetico, it seems to us a small thing to suggest that alternate cutting areas be found for the companies concerned. Mr. Bayly, the Deputy Minister of The Department of Lands and Forests, publicly stated at the Quetico Forum, St. Lawrence Centre for the Arts, November 3, 1970 that alternate cutting areas exist outside the park, in which case we would strongly urge the Advisory Committee to recommend that the Government take the necessary measures to accomodate the logging interests in this way. And then to redesignate Quetico Provincial Park as a Primitive Park and so protect

it against any form of commercial exploitation whatsoever.
As taxpayers this seems a small price to pay for the preservation of a priceless piece of Canadian wilderness heritage.

Thank you.

Respectfully,

Ethel Teitelbaum

Ethel Teitelbaum

PREVENT DESTRUCTION OF QUETICO
74 ROSEHILL AVE.,
TORONTO 7, ONTARIO



The Federation of Ontario Naturalists

1262 Don Mills Road, Don Mills, Ontario. Telephone: (416) 444-8419

B R I E F

concerning the preparation of a

Master Plan for

Q U E T I C O P A R K

as prepared for submission to the

Quetico Advisory Committee

February, 1971

Presented on behalf of the

FEDERATION OF ONTARIO NATURALISTS

"All provincial parks are dedicated to the people of the Province of Ontario and others who may use them for their healthful enjoyment and education, and the provincial parks shall be maintained for the benefit of future generations in accordance with this Act."

(Provincial Parks Act,
Province of Ontario)

The greatest benefit Quetico may have now, and the most precious to be maintained for posterity, is its quality of undisturbed wildness, where man can find solitude, where man can find himself in nature. This quality is elusive and hard to define in economic terms. It is the quality most in conflict with industrial development. Yet it is the quality which year by year gains value, as industrial development increases in other parks of North America. It is toward this quality, and its maintenance in Quetico Park, that it is most important that the Government of Ontario develop an attitude of pride and jealous protection. It is the stewardship of this Park, of this wildness, for which this Government is responsible to the people of Ontario today -- and to future generations.

The Federation of Ontario Naturalists wishes in this brief to argue that the maintenance of this quality of wildness can be best achieved by leaving Quetico as a site of ensured ecological evolution, with its prime purpose, wilderness recreation. Industrial commercial logging is incompatible with this purpose.

Quetico is a living museum of human and natural history. Today's canoeist relives the earlier journeys of Indians, voyageurs, explorers and west-bound settlers on one of the most important canoe routes across North America (appendix IV). Today, the Quetico is one of the last wild areas left for canoeing which is accessible by road. It is also considered to be one of the best. Its geography is unique in providing a variety of routes with good portages in a setting of wildness, beauty and historic interest. The jumbled drainage pattern and a complex geological history are revealed in the many routes available to challenge either beginner or expert in his quest for wilderness. The size of the park satisfies criteria established by the Canadian Society of Fishery and Wildlife Biologists ("two days travel by primitive means") as the minimum acceptable size for a wilderness recreation park.

There are many arguments for this ideal of Quetico as an island of natural evolution and ecological process in this area of Ontario. (See appendix II, III). Such a park would provide opportunity for observation of natural processes as they interact, undisturbed by man. This provides a sort of base-line for assessment of environmental manipulation in adjoining areas. This park would provide sanctuary for wildlife and plants which are unsuccessful in more disturbed areas, and a base population with diverse genetic backgrounds. Such diversity is necessary to the stability and health of ecosystems. The Quetico area is of particular interest in terms

of biogeography: several species of plants found here give clues to glacial history and early plant distribution in this part of Ontario, such as foam flowers (Tiarella cordifolia), wild ginger (Asarum canadense), hawthorn (Crataegus) and others.

There is heated controversy over the issue of logging in Quetico. Management of park lands for industrial logging is inconsistent with the concept of parks that is held by a rapidly growing segment of the population. Increasingly, the public seeks in parks the antithesis of industrially utilized land. The administration of Ontario parks must be responsive to this change in public attitude.

There appear to be two main arguments for logging in Quetico: First, that the only "good" forest management is commercial industrial logging; second, that termination of logging in Quetico will result in regional unemployment and economic decline. These can be countered from several directions. Forests can be managed in many ways to achieve various goals. There is a policy of no industrial logging in national parks, and these forests seem to appeal to the great numbers of national park uses. Specific aspects of industrial forestry can damage areas like Quetico, where soil cover is shallow, soil formation slow from predominantly granitic bedrock. (appendix II). To log Quetico is to take the capital of eons of natural process. Nutrient levels are too low, regeneration too slow, to pretend that this forest can be logged repetitively. Replanting of "desired" species does not replace the stability of the natural

forest. Forest "monocultures" have the same advantages, and the same drawbacks, as agricultural monocultures. These crops require cultivation, fertilization and intensive protection from pest infestation. The natural forest ecosystem has built-in controls, and does not need this kind of intense management. Death and decay are the basis of succession and nutrient cycling in forest ecosystems. Insects and disease are some of the agents of this process. Managing forests for commercial timber production means fighting these insects or diseases to get a good timber crop. But protecting a forest ecosystem for wilderness recreation does not require this intensive management. Natural process is capable of maintaining the quality of the wild forest.

The economic arguments presented rest mainly on 225 jobs in a restricted region. We completely agree that some readjustments must be made in case of financial hardship incurred by termination of industrial forestry in Quetico. But it is important that this regional problem not cloud the provincial, national and even international significance of this park as a wilderness recreation area. Surely Ontario can afford this much land devoted to wilderness recreation. Its significance will with time bring increasing economic input. Tourism is presently the third largest industry of this area, and has a great growth potential. (Appendix V).

The strongest argument against logging in this park comes from a question of what parks mean, and what people want of parks. With intensive effort, Quetico could be a successful timber management unit, just like any other piece of Crown land. It should be the site for unique wilderness experiences: for now and for generations to come. In earlier days, man has looked at wilderness as a foe, an unknown to be conquered. Today, man is beginning to recognize the value and the grandeur of this former foe, beginning to cherish its still wild vestiges. Man can learn from wilderness the rules of natural systems. The people of Ontario are asking for this park: as a wild area, not an industrial timber management area. It is these people and their descendents to whom this park is dedicated. Now is the time to heed their voices, to guarantee that Quetico will be wild for as long as there is man and law.

Recommendations

- I. That wilderness recreation be guaranteed as the prime purpose of Quetico Park as a matter of policy, with no industrial logging and a minimum of human disturbance of its wilderness character.
- II. That preparation of the Master Plan for Quetico involve both competent professionals of diverse background, and input from concerned citizens, considering the recommendations of Appendix I.
- III. That the classification of Quetico Park under this Master Plan be that of a Primitive Park.
- IV. That special designation be instituted for the area including the Dawson Trail Campground, and French Lake Road, so that these will continue to provide access to the fringe of the wilderness area for those visitors who might not want to undertake extensive canoe trips, yet wish to enjoy a taste of the wilderness experience of Quetico.
- V. That mining patents and licenses in Quetico Park be extinguished and all other alienated lands be repatriated.
- VI. That temporary financial hardship be minimized for individuals or companies affected by the termination of logging in Quetico Park.

Appendix I Guidelines and recommendations on the preparation
 of a Master Plan for Quetico Park.

The following five categories (A, B, C, D, E) are suggested as guidelines for park planning, with specific recommendations numbered under each.

A. Definition of park policy and specific concepts for
 Quetico Park:

1. Direction and definition of policy should revolve around the concept of "value of wilderness", that is, to provide wilderness and wilderness recreation for human edification and enjoyment.
2. Policy definition and planning must involve competent professionals of diverse backgrounds (including ecology, park planning, nature interpretation, geology, history) with provision for continuing communication with the public in the policy and planning of the park.

B. Compilation of background information on the regional, historic, ecological, resource significance of the park, its use and access:

1. Studies should be initiated to assess the carrying capacity of the park, both human and ecological.
2. Existing studies should be assessed and extended to complete a full ecological analysis of this area, so that planning and program decisions can be made on as sound a basis as possible.

C. Zoning criteria defined and applied:

1. Certain areas of ecological interest or fragility should be set aside in zones of maximum protection. "Sample" ecosystems, such as forest stands, wetlands, aquatic habitats, and complexes of these, should be set aside in this manner.

D. Program for resource conservation, interpretation and development:

1. The resource management concept in Quetico should be evolutionary: that is, to ensure that natural process continue in its own way. Human interference should be minimized.
2. Resource conservation and interpretation are vastly more important than resource development in this park.
3. Full study of an interdisciplinary nature should precede any development in this park (such as campgrounds, fire roads, etc.). These should be restricted to the periphery of the park, or to satellite parks, wherever possible.
4. There should be no further development of roads.
5. Consideration should be given to reducing present logging roads by physical means and tree planting, perhaps with the view of converting these to hiking trails.
6. The park interpretive service is to be commended, and should be extended to permit wider effectiveness. Interpretation increases the park user's awareness and understanding of the park and its complex ecological make-up. This provides one of the best guarantees of careful park use.

7. An optimal level of park use should be estimated, and the number of users at any time controlled by a practical and just plan.
8. No snowmobiles, all-terrain vehicles, motor boats, or other motorized vehicles should be allowed in the park, as these are incompatible with the purpose of wilderness recreation.
9. Intensive forest management techniques such as therapeutic logging or widespread aerial spraying are not consistent with the purpose of Quetico Park, in that these can be as disruptive of wilderness or ecological balance as is industrial logging.

E. Future planning goals:

1. Provision should be made for continuing study and assessment of the park, with interdisciplinary expertise and sensitivity to public awareness.
2. The overall policy of the master plan must provide means of excluding new threats (in terms of new technologies of locomotion, increased resource demand, increased recreational demand) to protect the park until consistency of any such development with this wilderness recreation policy is established.

Appendix II. The Ecology of Quetico Park.

General: Quetico is in the "Great Lakes - St. Lawrence forest" transitional between the more southerly deciduous forest and the coniferous boreal forest to the north. There is considerable local variation in community types, due to bedrock variation, aspect, regional climate, soil, disturbance history, etc.

Trees: White pine (climax dominant in dry, sandy exposed areas)
Red pine (generally succeeds jack pine)
Jack pine (dominant in early stages of succession)
Balsam fir (climax on wet sites)
White spruce (climax on wet sites)
Aspen (early successional stages)
White birch (early successional stages)
Various oak, elm, yellow birch, maples occur especially in the southern areas of the park.
Black spruce, tamarack, in bog areas.

Bedrock: Some of the oldest exposed rocks in the world are found here. Granite under about 70% of the park, hard, breaks down slowly to an acidic soil.
Sedimentary rocks under about 30% of park, breaks down more quickly to richer basic soil.

Fire and
Logging
History:

1872-1923	36% of park burned over
1923-1971	10% of park burned over
late 1800's to 1946	removal of select stands of red and white pine
1960-1970	clearcutting of spruce, jack pine in north-eastern area of park.

Soils:

Generally quite thin over bedrock, hence slow regeneration time (much of the nutrient store is tied up in plant biomass). Removal of standing crop removes nutrients.

Some small alluvial pockets with thick rich soil, clay pockets.

Soil types reflect nature of bedrock and drainage.

Modern logging techniques, using heavy machinery and building roads, etc., can result in several erosion problems, where this meagre soil is washed away.

Reforestation: Natural regeneration: aspen, birch not removed by logging are beginning to blow down in areas of Quetico. Lands and Forests replant red pine and jack pine. No attempt is made to re-establish the make-up of the original forest.

APPENDIX III The Importance of Wilderness to Science

(Excerpts from an article of the same name by J. Bruce Falls in *The Ontario Naturalist*, December 1967.)

Ecological Background

Each species of plant or animal is different from all other species. Through a long process of evolution it has become adapted to tolerate a particular range of environmental conditions and to utilize its environment in a particular way. We say it occupies a unique ecological niche or place in nature. The peculiar ecological position of a species is the result of its structure — ultimately its biochemical structure — and of the genetic material which transmits the information necessary to develop that structure in the environment of succeeding generations. Thus, the counterpart of its place in nature is the unique genetic information inherent in each species.

A species does not exist in a vacuum. It has become adapted to an environment consisting of physical substrate, climate and other species — an environment which provides shelter and food and includes predators as well as competitors for the resources it requires. Thus, a species is both sustained and limited by its environment. For sustenance it requires nutrients and energy. Green plants, through photosynthesis, elaborate their own organic materials from simple materials in the environment and incorporate a part of the sun's energy. Other organisms cannot do this and must obtain their food and hence their energy indirectly from other species. Some feed upon plants or other animals while others decompose dead organic matter. Thus, species are linked together in interdependent communities which, together with the physical environment, constitute ecological systems (ecosystems*) through which raw materials circulate and energy flows.

The number of species in a community is partly determined by the physical environment. Few species can live in harsh environments like the arctic and deserts, while in the moist tropics a tremendous variety occurs. In each area, a number of different ways of life can be pursued together. In the course of time a community develops from among those species that can tolerate a particular environment and coexist harmoniously. Some important or dominant species — for example trees in a forest — modify the conditions of the site and thereby exert some control over the composition of the remainder of the community. Thus, a community is maintained through a system of relationships which has slowly developed through evolution.

Ecosystems appear to be relatively stable, that is they resist change in a number of ways. Over long periods of time inorganic resources and organic production remain at about the same levels. This is because most materials taken up by organisms are eventually returned to the environment from which they were drawn. The same species continue to live together and even the numbers of each species appear to be controlled within limits. Complex communities in which many species interact seem to be the most stable. Invaders most often disrupt the simpler natural communities such as occur on islands or those modified by human activities. Also, violent fluctuations in the numbers of single species usually take place in simple northern communities or human crops.

Let me briefly recapitulate. A long period of evolution has given rise to a diversity of species, each

of which is uniquely adapted to its environment. These species are grouped in communities and ecosystems having a high degree of stability. This is implied in the popular phrase "the balance of nature". Stability exists with respect to the use of resources, species composition and the numbers of each species. It is brought about by a system of checks and balances, the workings of which we only dimly perceive. In the past, changes have occurred slowly so that evolutionary adjustment was possible and, although over long periods of time species appeared and disappeared and re-groupings gradually took place, there was continuity in the organized structure of the living world.

Let us turn our attention to man. In the stone age he was largely a nomadic predator exerting his influence over a limited range of prey species. But, as his culture developed and new tools increased his impact on the environment, he became an ecological dominant. He now exerts unprecedented influence on the environment and hence exercises power over other species. Today, man is changing the world at an ever increasing rate as his population and technology grows. As he preempts more and more of the world's space and resources to himself, many other species are driven to the verge of extinction. Complex natural ecosystems are replaced by simpler, less stable ones in the form of crops, pastures and habitations. Exotic species are introduced to these altered environments. Erosion is speeded up and nutrients are flushed into rivers, lakes and the sea instead of being recycled through natural ecosys-

tems. They are replaced by fertilizers mined from rocks, thus speeding up the use of capital resources. Radioactive materials, poisons and the by-products of industry are distributed over the landscape confronting living systems with challenges new to their evolutionary experience. The rate of change is so fast as to preclude the possibility of adaptation for many species. Thus, the richness and stability of the natural world are being lost and man may even render his environment unsuited to his own survival.

The Need for Protection

If man is to survive he must learn to manage his environment more wisely. The way things are going, he may do irreversible damage to the natural world which will lead at least to a severe restriction in the choices open to future generations. Among the possibilities of permanent damage are the extinction of species and the destruction of complex ecosystems. These in their enormous variety are priceless resources. The significance of any species is largely unknown. We do not fully understand its role in the ecosystem of which it is a part and we cannot foresee the potential value of its genetic material for our own use. Many species have contributed therapeutic chemicals for medicine or inherited qualities to our crops. We can be sure, however, that, if we allow a species to become extinct, it has no further value. The only way we can prevent extinction is to preserve the ecosystems in which species live.

Complex ecosystems with their natural stability are valuable buffers against too drastic change of environment — insurance against our mistakes. At the very least they provide a measure of protection for the landscape they cover. Moreover, if we can understand their workings we may be able to manage better the systems which we have altered

to our own purposes. Thus, ecosystems as well as species are repositories of valuable information. There is a real fear that before this information is turned to knowledge, the systems themselves may be destroyed.

We must protect nature in order to conserve our biological resources. Basically, what is involved is the preservation of natural areas. And what is a natural area? Man's influence is almost everywhere and there is every gradation from undisturbed ecosystems to the most altered urban environments. Man himself is a natural phenomenon and, in that sense, all environments are natural. Yet, as we have seen, man is rapidly changing his environment and doing it in such a way as to decrease the stability of ecosystems. If we want to retain as much variety as possible — as I believe we should — it is particularly necessary to safeguard those ecosystems least influenced by man. However, at this late date, we cannot afford to select only completely untouched areas for preservation. Indeed, there may be considerable merit in maintaining areas representing various degrees of alteration.

Now I should like to state what I think are the reasons for setting aside a system of nature reserves.

First and foremost is the need to conserve the unique values inherent in species and ecosystems to which I have already referred. In a similar way, geological type localities and sites of archeological value should be preserved. In each case we are dealing with a portion of the natural and cultural heritage of the whole world. If we believe that natural areas in Africa or Australia should be set aside, others will expect us to preserve environments that we con-

trol. As an example, the subcommittee dealing with conservation of ecosystems for the I.B.P. in the United States proposes inviting participation of Canada in maintaining a joint register of natural areas.

Second, there is a need for research into ecological systems to provide a basis for intelligent management both of wild areas and of man-altered environments so as to maintain their productivity and stability. Studies of the undisturbed habitats will serve as controls by which to measure present and future changes in exploited ecosystems. Outdoor laboratories are needed for a great variety of researches. In an article in the *UNESCO Courier*, Dr. Francois Bourliere refers to protected zones in the African savannah as "incomparable laboratories for the study of tropical ecology and all its implications; agricultural, zootechnic, and medical . . . parks and reserves . . . are as indispensable to research in pure and applied ecology as are hospitals to medical research . . . progress in ecology makes it possible to give mankind effective help in its fight against hunger and to contribute towards better living conditions".

Third, there is the intellectual value of studies of the natural world. In his paper, to which I have already referred, Dr. Cowan speaks of the challenge to preserve fragile and non-adaptive species as an intellectual adventure which is bound to benefit society.

Fourth, is the educational value of natural reserves to the public, since part of reserves can serve as outdoor museums providing historical and ecological insights. Proper treatment of the environment will ultimately depend on the understanding of the majority of men.

Fifth and finally, nature reserves like other natural areas provide aesthetic inspiration and recreation in the best sense. Aldous Huxley referred to nature as "half the basis of English poetry." //

APPENDIX IV The History of Quetico Park

(Excerpts from the article "Quetico - Superior Country: Wilderness Highway to Wilderness Recreation" by Bruce M. Litteljohn in the Canadian Geographic Journal.)

34 About nine thousand years ago aboriginal hunters ranged this country in pursuit of game, which they attacked with stone-tipped spears. These Paleo-Indians were the first of a series of pre-historic peoples who inhabited the Quetico region, or vicinity, between 7,000 B.C. and the arrival of European explorers late in the seventeenth century. Little is known of the early Quetico natives, but it is clear that by the end of the prehistoric period the bow and arrow, pottery of fired clay, bark-covered wigwams, fish hooks and nets, and the toboggan, snowshoe and birchbark canoe had made their appearance. This, roughly, was the degree of technological achievement when white men first arrived in the region.

Some 300 years have passed into history since the first son of New France launched a canoe on Quetico waters to inaugurate this section of the fur trader's highway to the West. Who, exactly, he was, we do not know. He may have been Radisson or Groseilliers, who wintered together at the western end of Superior in 1659; or he may have been some unsung adventurer from the small colony on the St. Lawrence. At any rate, we do know that Jacques De Noyon, in 1688, ascended the Kaministiquia, packed his gear across the height of land, swung west among the jumbled lakes, beaver-meadows and rivers of the Quetico and arrived, finally, at Rainy Lake, where he spent the winter.

For about thirty years after De Noyon's trip, French records are silent about the Quetico region. And, although it is almost certain that other white men paddled the waters west of Superior, it is not until 1731, when Pierre Gaultier, 'Sieur de la

Vérendrye, arrived in the area, that the story again moves forward with any certainty.

With the journals, reports and other written accounts of early exploration, our knowledge of the Indians is greatly increased. These people, the true pathfinders and masters of the country, played an important role throughout the early historical period, a role quickly appreciated by the Frenchmen who went up-country to move and live among them. To these men, the Indian was schoolmaster; and, with his encyclopaedic knowledge of the wilderness, his technology moulded by its demands, and his senses sharpened from boyhood to meet the life or death challenge of the hunt, the native had much to teach.

* * *

At the time of La Vérendrye's arrival the natives of the Quetico area were Ojibwa who, for decades, had been engaged in bitter warfare with the Forest Sioux whom they had gradually driven to the southwest of the region.

* * *

Perhaps associated with the Grand Medicine Society are the mysterious pictographs, or rock paintings, of Late Woodland and early historical times. There is still much to be learned concerning the meaning of the pictographs, but one thing has been firmly established: within the Quetico, often located on looming rock faces, are to be found some of the finest examples of these ancient markings. Intriguing vestiges of a faded culture, they remind the paddler of today that other canoes glided these waters in years long past, and that this was the domain of the Indian centuries before the first explorers started in motion the Euro-

pean subjugation of North America.

Most of the paintings, such as the outstanding ones at Darky Lake, are about five feet above water-level and are done in a rusty red colour very similar in shade to iron oxide stains. Almost all of them, whether on imposing cliffs or small rocky islands, are near the water's edge, a fact which suggests that they were painted from canoes.

In content, the pictographs range from simple hand marks and representations of men, animals and objects to mythological creatures such as the Mishipizhiw, or Great Lynx, which was thought to inhabit certain dangerous rapids. Others appear as undecipherable abstract symbols. It may be that some of the rock paintings stand as records of hunting or war parties, as seems the case with the "warrior group" at Lac La Croix; but, on the whole, it is probably correct to say that the aboriginal artist was largely concerned with expressing the magical aspect of his life: his spirit world of dreams, legends and mysterious deities.

* * *

With the advent of white traders, the way of life of the Quetico area Ojibwa was to change radically as they came to depend on tools and weapons of European manufacture. This mounting reliance on external sources of supply was, among other things, to alter their hunting habits. Traditionally sources of food and covering, the beaver and other furbearers were to become economic commodities, the almost sole source of the Indian's bartering power. A new day had dawned, and what had been a harsh, but essentially self-sustaining, way of life, in which a precarious balance existed between the Indian and the natural world,

was thrown out of equilibrium as the rapacious French assault on the beaver grew in intensity and spread into the Quetico region and beyond.

For the Indian, the incursions of the fur trade marked the beginning of cultural decline. For the French, however, the trade meant physical expansion and economic growth, and it engaged the minds of many men of ability and imagination. Of these, La Vérendrye was among the most important. By the time he received his commission as Commandant of the Western Posts in 1731, however, France had suffered her first permanent territorial losses in North America, and Britain (under the terms of the Treaty of Utrecht) had become the recognized owner of the Hudson Bay area. By now, also, Hudson's Bay Company men had explored west from the shores of the Bay, thus indicating that they, as well as the French traders, had designs on the western interior. Hudson's Bay Company activity did not, however, become heavy in the inland regions for some years. In the meantime, La Vérendrye and his followers led the wave of French traders by exploring the Lake Winnipeg Basin and recording the interrelationships of the rivers which radiate out from this hub of the interior.

Between 1731 and 1759 many French canoes followed La Vérendrye's lead by passing along the Quetico water routes which converge at Lac La Croix, some coming west from the "Great Carrying Place" at Grand Portage, others taking the northern route via the Kaministiquia. The result was that by the end of this period French trading posts included Fort St. Pierre, on Rainy Lake; Fort St. Charles, on Lake of the Woods; Fort Bourbon, at the mouth of the Saskatchewan; and several others far to the west. In the Quetico, itself, the French had posts at Saganaga and Basswood Lakes. More important, the Quetico region was now firmly established as a link in the fur trader's trunk route to the West.

With the outbreak of the Seven Year's War, this trend of ever-increasing use was reversed. The British siege of New France now began and trade on Lake Superior and to the

west was all but abandoned as, one by one, the "Posts of the Western Sea" were closed. With the French gone, except for the odd *coureur de bois*, the Quetico became, once again, the almost exclusive preserve of the Ojibwa.

In the West, as in the East, it was an end and a beginning. With France eliminated, after 1763, as a North American power, the English, American and Scottish adventurers who flocked into Canada behind Wolfe's soldiers, were quick to follow where the French traders had led. Soon these "Pedlars from Quebec" (including Joseph Frobisher, Alexander Henry the Elder and Peter Pond) were passing through the Quetico to penetrate deep into Rupert's Land. In 1774, alone, sixty North canoes, paddled by tough and experienced French *voyageurs*, went inland from Grand Portage to engage in open and hostile competition with the Hudson's Bay Company.

Economic competition did not, however, exist only between Hudson's Bay Company and independent traders, for the men from Montreal engaged in aggressive and damaging rivalry among themselves. Added to this was the fact that enormously extended lines of trade required a high degree of organization and greater capital investment than many independent traders could comfortably manage. Accordingly, in 1779, the traders of the Northwest, in the words of Sir Alexander Mackenzie, "joined their stock together, and made one common interest", thus forming the original North West Company. By 1783 it was firmly established as the first joint stock enterprise in British North America.

Under the dynamic leadership of men such as Simon McTavish and William McGillivray, these Lords of the Lakes and Rivers set out to drive the Hudson's Bay Company to the wall. The struggle was long, bitter and, at times, vicious, as Lord Selkirk (who canoed through the Quetico with some of his Red River settlers) was to learn to his dismay. Finally the two firms, finding intense competition damaging, merged in 1821. But, before this step was taken, the Northwesters — Mackenzie, Thomp-

son, Fraser and their associates — had run their canoes down swift mountain rivers to the Pacific, and had struck north to the Arctic Ocean.

All of these men, along with their French-Canadian and Métis *voyageurs*, paddled Quetico waters on their way to the trading frontiers, and they marked their passing with many colourful place-names, a few of which, along with many equally colourful Indian names, have escaped revision and remain on Quetico maps to remind us that the Ojibwa, explorer and *voyageur* once passed this way.

After a decade of North West Company existence, and following the American Revolutionary War, international rivalries seriously began to complicate the already competitive trading situation. And, with the United States Government declaring its intention to tax British merchandise passing through Grand Portage, the Northwesters' search for an alternate route to the West became one of pressing importance. In 1798 the search bore fruit when Rodérick Mackenzie (guided by Indians) rediscovered the strangely forgotten French route via the Kaministiquia. The central, as well as the southern, waters of the Quetico now came into heavy use once again, and Fort William, after 1804, replaced Grand Portage as the major inland depot of the North West Company. From this time until shortly after the merger of 1821, canoe brigades would pass to and fro across French, Pickrel and Sturgeon Lakes, and innumerable packs of trade goods and furs would be trotted across Deux Rivières Portage, Portagé des Morts and the other Quetico carrying places.

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Fur traders were not, however, the only users of the Quetico canoe trails. In June, 1843, for instance, Henry Lefroy (on his way to make magnetic surveys in the North) passed along the northern route, which he described as "a succession of pretty lakes emptying into one another by short crooked channels broken by falls and rapids, and necessitating many portages."⁵ A year later, four Grey Nuns, en route to the Red

River settlement, travelled the same way. It seems that the Sisters enjoyed the wild scenery but found their *voyageurs'* language and songs a bit on the ripe side. To offset this unhappy circumstance the good Sisters spent much time praying aloud, singing hymns, and reading from pious books. If the *voyageurs* were not amused, Sir George Simpson (who had provided their services) was. It is reported that his mirth was practically unbounded when told of this possibly unique journey.⁶ Two years after the Grey Nuns' trip of 1844, Paul Kane, the illustrious painter of Canadian Indians, canoed over the route, followed, in 1848, by Sir John Richardson who was heading into the Northwest in search of the ill-fated Franklin Expedition. In addition to such travellers, express canoes of the Hudson's Bay Company - notably those of Sir George Simpson, paddled by his superb Iroquois crew --- continued to pass across Quetico waters well into the 1850's.

During the interim, a new type of explorer came into the region. These were not servants of trading companies. They were, rather, servants of government, such as those involved in establishing the long disputed boundary line between British territory and the United States. Among their number were David Thompson, Dr. John Bigsby and Major Joseph Delafield, all of whom left interesting accounts of the Quetico region. The final reports of the Boundary Commissioners were submitted during December, 1827, but it remained for the Webster-Ashburton Compromise of 1842 to establish the International Boundary along the old Pigeon River canoe route which today separates Quetico Provincial Park from the Superior National Forest.

In the meantime, Confederation (on July 1, 1867) became a reality, and the new federal union began its official existence. The race for the Pacific, and to incorporate Rupert's Land, was the first urgent task faced by the Canadian Government. As yet, the West, including the North-West Territories and British Columbia, as well as Rupert's Land, stood

outside the union. In addition, the aggressive and expansionist sentiment of "Manifest Destiny" was in full career south of the border; and, in Minnesota particularly, voices were raised in favour of annexation of the territory to the north. If the West was to be saved, and the broad concept of Confederation realized, Canadians would have to act --- and quickly.

As a preliminary step, Simon J. Dawson, in 1868, was sent by the Department of Public Works to supervise the charting and construction of a land and water transportation route from Thunder Bay to Fort Garry. In its essentials, the route followed the old North West Company canoe trail; and so, as the work of surveying, rediscovering portages and cutting roads got under way, white men once again mingled with the native Ojibwa along the historic waterway.

Battle or no, the Red River Expedition deserves its place in military annals on the basis of logistics. Many onlookers, aware of the difficult country to be traversed, were amazed at its success. And well they might be, for, in 96 days, 1,400 men (carrying full supplies for two months) had travelled about 500 miles on foot and in open row-boats. They had, moreover, crossed some 47 portages, and had carried through their adventure in a harsh and unfamiliar environment without a single loss of life. In accomplishing this, they also inaugurated the Dawson Route, the new Dominion's first highway to the West. The Quetico had not seen such activity since the days when an estimated 2,000 Northwesters crossed it each season; nor would it see again the amount of traffic that plied its waters in the spring, summer and autumn of 1870.

Considered as a business venture, the Dawson Route was a dismal failure. Judged by other criteria, however, it claims an important place in the story of Canadian development. For one thing, at a time when Canadian-U.S. relations were decidedly strained, it provided an all-Dominion way to the West which was employed

for strategic purposes. In addition to the Wolseley Expedition, approximately 200 soldiers were sent into Manitoba in October, 1871, to repel a threatened Fenian invasion; and, late in the season of 1873, 197 men of the newly-formed North-West Mounted Police crossed the route on their way west.

Even in decline the Dawson Route served a purpose, as was noted by W. McInnes of the Geological Survey of Canada when, in 1897, he wrote that, "when its abandonment was inevitable it rendered valuable service in facilitating the construction of the Canadian Pacific Railway. Indeed without this route for the carriage of men and supplies the building of the road would have been a much more arduous undertaking."

In a broader sense, and of more enduring consequence, the Dawson Route gave stimulus to the settlement of the Rainy River Valley, Manitoba, and the western interior. And, going even beyond this, it can be seen as an expression of the spirit of Confederation --- the desire to save the West for Canada and to forge a Dominion transcontinental in its extent. "

Appendix V. Relative economic importance of tourism.

Excerpts from Kates, Peat and Marwick, 1966, Northwest Ontario
Tourist Industry Study (number 25055).

Estimated value of tourism to region	\$30,000,000
" " " logging plus pulp and paper	106,000,000
" " " mining	57,000,000

The estimated growth rate for tourism is 11% annually.

Excerpts from "Design for Development: Northwestern Ontario"
(Ontario Department of Treasury and Economics)

Recommendation 2:22 - " The wilderness qualities of the area
lying between Lake Superior and Rainy Lake,
especially Quetico Provincial Park, should
be carefully preserved. Wood cutting
operations should be closely controlled in
all areas which have high recreational
values."

Summary of Regional Problems and Potential.

The Forest-Based Industries

1. The wood industries and the paper and allied industries employed 9,208 people in Northwestern Ontario, or 70% of the region's manufacturing labour force in 1966. This does not include those employed in primary forestry, that is, the woods operations. Secondary employment in the forest-based industries has remained fairly static during the 1960's because of depressed conditions within the industry and because mills were operating below capacity. Increased mechanization is continuing to reduce numbers employed in woods operations.
2. Most of the forest species, are, in total, underutilized. In aggregate, allowable cut greatly exceeds actual cut; nevertheless the pulp and paper firms are having to go increasingly farther afield for wood, close-in supplies having been largely exhausted. Higher costs are incurred in hauling wood to the mills, and may eventually become a critical factor in their competitive position relative to producers in other regions.

3. Rising world demand for pulp and paper has led to increased production and to the expansion of one mill (Ontario-Minnesota, Fort Frances). Expansion of the industry will probably be general over the next twenty years, with an estimated 5,000 new jobs being created. Further, there are adequate wood supplies to support one or two additional mills in Northwestern Ontario, particularly in the Red Lake and Sioux Lookout areas.

The Mining Industry

1. Mines in Northwestern Ontario yield iron, copper, nickel, zinc, lead, gold, silver and cadmium. The value of production in 1968 was \$130.5 million, a rise of 105 per cent since 1958.
2. Employment in the mining industry increased from 3,410 in 1958 to 4,412 in 1960, and has since declined to 3,730 in 1968. Most reduction has occurred in the gold mining camps (Red Lake and Geraldton), where mines have closed because of rising costs, ore depletion, and fixed prices for gold. With the closure of the McLeod Mosher mine in Geraldton in June 1970, only four producing gold mines remain in Northwestern Ontario. Three of these qualify for cost-aid under the Emergency Gold Mining Assistance Act (EGMA), which has recently been renewed until the end of 1972. It is probable that all gold mines, except for Campbell Red Lake, will close within the five-to-ten year horizon.
3. All communities which depend on mining (Atikokan, Red Lake, Balmertown, Madsen, Cochrernour, Ear Falls, Manitouwadge, Geraldton) sooner or later must either establish alternate means of employment, or face drastic decline. Some transition has been made from mining to forestry in Geraldton.

Tourism and Recreation

1. The tourist and recreation industry is a significant component of the regional economic base. Tourism has been identified as the third ranking industry in volume of dollar earnings and numbers employed, following forestry and mining. Roughly 10 per cent of the labour force is employed directly or indirectly by this widespread industry.
2. Tourism in Northwestern Ontario depends on the region's natural environment: scenic beauty, clean air and water and wildlife. The primary activities are therefore space extensive - automobile and water-based touring, hunting and fishing.
3. As with other industries, the performance of the tourist industry depends on the size, location and stability of the market.

Tourism in the region is at present heavily reliant on the urban populations of the north-central United States and southern Ontario. The industry is based on a fortuitous mix of natural resources, proximal urban concentrations and an efficient road network bridging the supply and the demand.

4. A problem affecting tourism is the shortness of the summer season. The peak tourist season - June to August - results in irregular employment and limited annual earnings. Although there is a comparatively long winter season, winter recreational facilities are limited; there is, however, a growing number of skiers coming to Thunder Bay area. The winter tourist industry has a good potential for growth.
5. It is paradoxical that while the distance between the region and the major population concentrations has been a major factor in preserving the attraction of unspoiled wilderness, at the same time it has prevented the full development of the resources.
6. The uneven distribution of the developed public facilities prevents the tourist from planning a trip based upon stops at strategically placed recreation sites. Facilities should be developed not only according to the resources but according to the needs of the traveller.
7. No area in the region provides a multi-recreational facility including, for example, swimming, fishing, hiking, and shopping all in one general location.
8. The limited amount of available capital and the lack of entrepreneurial talents have been among the major reasons that the industry has not met the expectations of local residents.
9. The preservation of environmental resources is becoming an important issue in Northwestern Ontario. Forest operations are threatening the recreational potential of some areas, while industrial pollution of some rivers and lakes has been recently discovered to be severe. These problems are, however, still localized, and with proper safeguards the environment will continue to be the region's greatest asset.

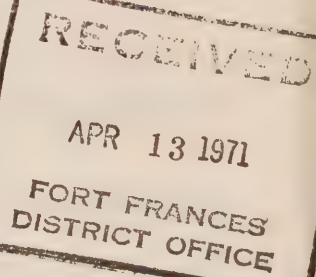
Projected Regional Employment needs for 1971-1991:

Mining	2,000 - 3,000 jobs	
Pulp and paper	4,000 - 5,000 "	
Manufacturing	4,000 - 6,500 "	
Service industries	8,000 - 10,000 "	(including tourism)

Appendix VI. The Federation of Ontario Naturalists.

The Federation of Ontario Naturalists is Canada's largest conservation and natural history organization, having over 8,000 direct adult members and about 25,000 enrolled in its youth program. Another 5,000 adults belong to the forty-five federated clubs throughout the province. One of these is located in Thunder Bay, with a membership of over 100. Another 150 people in the Quetico region are direct members of the F.O.N. The aims of the Federation are to ensure an attractive and livable environment through education, conservation and research. We wish to provide an environmentally oriented, provincial perspective toward regional conflicts as they arise.

198 Forestwood Drive,
Oakville, Ontario,
April 8, 1971



Mr. R. T. Thompson, Secretary,
Quetico Advisory Committee,
Ontario Department of Lands and Forests,
Fort Frances, Ontario.

Dear Mr. Thompson,

I am President of the South Peel Naturalists' Club,
an organization with over 200 members, residing
mostly in the municipalities of Mississauga, Oakville,
Toronto and adjacent area, and a federated club
of the Federation of Ontario Naturalists.

Since I have only recently returned from an extended
overseas trip, I have not had an opportunity to
discuss with the Executive Committee of the South Peel
Naturalists' Club the preparation of a Brief
concerning the preparation of a Master Plan for Quetico
Park in time for due consideration by your
Committee. However, at our regular meeting last
evening, our Executive Committee unanimously
supported my proposal to write to you in
full support of the excellent Brief of the
Federation of Ontario Naturalists, recently
submitted to your Committee, in the hope
that you might take note of our organization's
opinions in the matter of the future uses of
Quetico Park.

Accordingly, I respectfully request that
our Committee consider the recommendations
of the Federation of Ontario Naturalists⁷ to have
the endorsement of the South Peel Naturalists' Club.

Yours very truly,

T. A. Brown

President

South Peel Naturalists Club

Q U E T I C O B R I E F

submitted by

*The Environmental Studies Group
The College of Education
University of Toronto*

INTRODUCTION

The Environmental Studies Group of the College of Education consists of 75 persons who have an interest in the Quetico problem that goes beyond personal desires. We have committed ourselves to the education of future generations and, consequently, tend to view the problem in that perspective.

All of the members of this group have a deep interest in ecology. Further, most of us possess considerable background in that field of science since we studied it as a part of our undergraduate work in biology at university. Our group also includes persons who specialized in chemistry, physics, geography, physical education, psychology, and history.

The group does not lack practical experience. Many members of the group have been involved in field work conducted by universities, the Department of Lands and Forests, and the O.W.R.C. Some of our members have a first-hand knowledge of Quetico Park.

MAJOR PROPOSAL

The Environmental Studies Group submits that Quetico Provincial Park will best serve the long-term needs of the people of the Province of Ontario if it is reclassified as a Primitive Park (as defined in CLASSIFICATION OF PROVINCIAL PARKS IN ONTARIO, Ontario Department of Lands and Forests, 1967).

ARGUMENTS IN SUPPORT OF PROPOSAL

1. ECOLOGICAL SIGNIFICANCE OF A 'PRIMITIVE' AREA

We, as students and future teachers of Environmental Studies, have definite goals and ideals which conflict sharply with the present park policies in Quetico Provincial Park. Although our primary objective is to build up an understanding and knowledge of ecology in our students, our ultimate goal is to instill in them an attitude towards ecology and the environment which involves a love of nature and a respect for the natural world. We see in the Quetico wilderness areas which still remain untouched by man, a definitely valuable complex community which contains a diversity of unique species linked together interdependently. Such a diverse and complex ecosystem contains an inbred stability which acts as a buffer to environmental damage, yet, throughout North America, increased population pressure and resource utilization has quickly diminished our wilderness areas. Because these areas are rapidly shrinking, it seems clearly evident that their ecological worth to society as a whole should be greatly increased.

In the realm of scientific research these natural untouched areas are extremely valuable as sites for original studies concerning undisturbed wilderness. Such a wild life sanctuary would preserve unique elements of the landscape and sensitive ecological niches. Properly utilized this wilderness area can be set aside for scientific purposes to provide an ecological system which could represent a "control environment" in the sense that it had in no way been drastically altered by the exploits of man. A wilderness area park under the classification of Primitive Park would insure the conservation of natural habitats and prevent the threat of extinction of many endangered mammalian and avian species. It is obvious that the complex, balanced, stabilized ecosystem of Quetico Park is not compatible with the commercial lumbering and the multiple land use techniques

presently employed within its boundaries. We are not completely opposed to commercial lumbering or multiple land use in all provincial park areas. We feel, however, that there already exists throughout Ontario sufficient parks for campers, boaters and hunters to justify our desire to change Quetico to a primitive park category. Commercial lumbering can be carried out successfully beyond the limits of this undisturbed ecosystem since Quetico contains no tree species in commercial quantity that cannot be found beyond the park boundaries.

In terms of ecological concepts which are now being developed at all levels of the educational system, Quetico has a value which must override those recreational and economic considerations which are a direct confrontation to the whole biological community. The complex cycles which have adhered to the rules of nature for thousands of years cannot tolerate the irreversible damage of commercial lumbering. Nor can we expect the superficial attempts of forest management and reforestation to replace an intricate web of life which has been built up over the centuries.

Commercial logging has been justified on the basis of the premise that such activity actually improves the quality of the forest by removing older trees which will eventually die and fall over. Clearing techniques, claim the forest industries, provide an opportunity for pioneer species to grow as a result of reforestation. These arguments are based on economic considerations. In ecological terms, commercial logging is destroying any environmental value that the park possesses. First, these forest management techniques are destroying a natural environment and are replacing it with a man-made, artificial one. Similar tree species are not always replaced and reforested trees of similar species are replanted in unnatural concentrations. Not just tree diversity is destroyed. Animal niches of invertebrates and vertebrates alike are uprooted and eliminated just as irreversibly as the complex stratified soil layers which have required years to

develop. The construction of huge, penetrating logging roads and the distortion of the natural forest landscape clearly violate any concept of ecological preservation.

Quetico park at present contains only a small percentage of trees which are over one hundred years old and the majority of the trees are only around fifty years old. Because of these facts most of the areas within this wilderness will not reach the climax forest stage for a few decades. Any present commercial lumbering by forest industries or future therapeutic lumbering by the forest management branch will certainly not benefit these wilderness areas in any ecological respects. We can, therefore, no longer accept the claims of ecological betterment which forest industries and the forest management branch state to be an important consideration in their approach to management of the Quetico Park area. We must assume, then, that beneath the smoke screen of forest management by commercial lumbering is the real underlying reason for their present policies - a purely economic one. Mechanized forestry is inconsistent with the basic philosophy and objectives of wilderness areas stated in the Department of Lands and Forests publication for Classification of Provincial Parks in Ontario. In order to maintain the ecological balance of these wilderness areas without resorting to mechanized forestration we must develop new alternatives. In the United States the National Parks Service, Forests Service, and other agencies managing nature reserves have developed an environmental management approach. Dr. Miron L. Heinselman in an article in the National Parks and Conservation Magazine, Volume 44, No. 276, September 1970 suggests that small areas of prescribed burning has a relevant application in areas similar to Quetico Park.

Because of the immediate ecological state of Quetico Provincial Park with its complex and unique ecological properties and with the imminent danger of irreversible destruction of this natural ecosystem, we feel that it is

only logical that the present commercial logging be terminated and that the whole management policies for this area be reconsidered by the governmental authorities. In many high use sites mechanized forestry is a realistic and practical management choice because timber is an economic by-product. But now the time has come when ecological values must outweigh the economic ones in wilderness areas such as Quetico Provincial Park.

The Quetico Park issue is a concrete example of how wilderness areas initially and primarily devoted to the people and to the preservation of a natural habitat have become exploited by forest industries. The Order in Council which established Quetico Park in 1913 states clearly that its primary function was for the benefit, advantage, and enjoyment of the people of Ontario and for the protection of the animals therein.

We, as teachers of Science, Geography, Environmental Studies, Outdoor Education, and many other subjects, see a need for the concepts of ecology to become known and understood by our students. We feel that ecologically priceless areas of untouched natural beauty such as those found in Quetico can offer our students concrete evidence which will aid them in the development of ecological attitudes. Only by exposing them to undisturbed yet accessible areas of ecological significance can we hope to instill meaning into our ecological themes. The fields of Biology, Environmental Studies, and Outdoor Education are playing an ever-increasing role within the classroom and beyond its limits. For this reason, as well as many others, we, as teachers, are deeply concerned about the fate of wilderness areas which are becoming more than ever potential learning and education sites for our students. Now and even more so in the very near future educational fieldtrips will extend far beyond the limits of nearby areas and even beyond Algonquin Park. If the unique wilderness areas of Quetico are there we will seek them out. If not, the tremendous educational experience lost to students already plagued by a

polluted environment will have to be balanced by the few dollars gained through commercial lumbering.

Quetico Park, then, has significant ecological values which can be a tremendous benefit to the people of Ontario, to scientific researchers, and to students who are developing an attitude towards their environment, as well as to us, the teachers, who are trying to develop the minds and bodies of our present and future generations. Let Quetico fulfill these objectives.

2. RECREATIONAL VALUES OF A 'PRIMITIVE' AREA

According to the provincial park classification, the purposes of a PRIMITIVE PARK are: to set aside representative areas of natural landscapes for posterity; to provide an opportunity to enrich and expand the outdoor knowledge and recreation experience in natural wild conditions; to provide an outdoor laboratory for non-destructive scientific study. Also recognized is the psychological need of many people to know that unspoiled wilderness areas exist.

Keeping in mind that the main concern of our submission is an ecological one (i.e. to set aside representative areas of natural landscapes for posterity . . . and to provide an outdoor laboratory for non-destructive scientific study), we feel the opportunity to enrich and expand the outdoor knowledge and recreation experience in natural wild conditions is relevant and vital to our generation and succeeding generations.

In a time of psychological stress, noise pollution, and decreasing personal territory, the recreational values of a primitive park take on increased importance. The abundance of available areas for motorized recreational vehicles is well known. A more significant yet less wellknown fact is that there remain virtually no specified areas for enjoyment of the truly Canadian sports in an environment suited for them.

Canoeists and snowshoers demand unspoiled areas without noise contamination or garbage contamination. Such areas, in regions accessible to large population centres, are very few. With the continued ecological mismanagement of Quetico, such areas virtually disappear. A primitive park classification for Quetico is vital.

In our society an increased trend toward the 'simple, primitive life' is very evident. The use of Quetico by the St. John's Boys School (Winnipeg) is just one example of the desire of young people to experience the 'simple, primitive life'. The upsurge in the use of conservation areas and provincial parks by the public is an example of the desire and, undoubtedly, the need of many people to 'get away from it all'. The increased interest of many people in canoe tripping, wilderness hiking, and wilderness camping is an indication that crowded conservation areas and provincial parks can no longer serve the recreational needs of a significant portion of our population. With the virtual ecological destruction of Algonquin Park by motorboats, snowmobiles, lumbering, heavy tourist traffic, and lodges, there remains no accessible area where 'roughing it in an unspoiled environment' is possible. Of great concern to many biologists, at the moment, is the fact that man may have as a part of his genetic makeup the need to return from time to time to the outdoors. If this is true, then the human race faces extinction when available regions of true outdoors disappear. For these reasons we advocate a park which is accessible but which retains the natural beauty and ruggedness of Canada - a role ideally served by a reclassification of Quetico to primitive status.

The last and most important concern that we have as educators is the debt which we owe to oncoming generations - a responsibility to leave at least a part of Ontario as we have found it so they may be educated first-hand in the natural history and tradition of our land. A chance to see an

unpolluted, tourist-unspoiled, natural environment is going to be very rare for succeeding generations unless we face the challenge now. One way we can meet this challenge is to forget our greediness. Let us preserve one part of Ontario as it was. Quetico as a primitive park would preserve our tradition as Canadians and as lovers and protectors of natural, unspoiled beauty.

3. ECONOMIC CONSIDERATIONS

We realize that we are not experts in this domain. We also realize, however, that economic arguments carry considerable weight in political circles. As a result, we wish to question the case of the forest industry in this matter. The necessity of cutting Quetico trees and the impact of any resulting unemployment in the area, if the logging is stopped inside Quetico, are the main issues.

Regarding the revenue from the forest industry, we understand that, in the majority of cases, the Government of the Province of Ontario invests more money in reforestation of the cut-out areas than it receives as direct income from logging operations. Even with the tax revenue from the sale of wood products, the profit from Quetico lumbering must be slight, especially when compared to the full scale income from the forest industry. In 1969 there were 103,000 square miles of Ontario under timber license, much of this undoubtedly contributing to the economic growth of the Province. But do the profits from the 468 square miles of Quetico under license represent an important percentage of the total timber revenue?

Is the Quetico operation so uniquely different that the economy cannot forego it? The trees are essentially the same as the regions bordering the Park, except that Quetico trees were selected by an Order in Council in 1913 "for the benefit, advantage, and enjoyment of the people of Ontario." The logging companies want the timber for pulpwood, testifying to the trees' ordinary quality. There is currently no significant

need in Ontario for the wood of the Quetico trees. To not cut now means that the wood will be there if such a need arises in the future.

Then why does the demand to immediately log Quetico exist? Is it because the forest requires management? Forest management has less destructive means (such as controlled burning) than mechanized industrial logging if management is required to preserve our forests. We understand that it is simply easier and cheaper for the companies to harvest in Quetico. But does this justify the desecration of an irreplaceable wilderness park?

The forest industry maintains that the timber of Quetico is being wasted if it is not cut. But are they utilizing fully the other areas they are licensed to cut? And, is usefulness to be judged only in terms of board feet and dollar bills? Such attitudes would lead to the sale of city parks which are on high value land because they are not productive in terms of hard cash. Should we also advocate the rental or sale of other historic treasures because of their economic worth? The trees will not be wasted if they are left alone for Ontario citizens to appreciate for their unique non-economic value.

There is also the problem of increased unemployment in the region if the companies are forced to stop cutting in Quetico. The Government will eventually have to face this problem whether Quetico is made primitive or not, because of increased mechanization of the logging operations and the use of highly skilled personnel in the forest industry. In the Quetico decision how many men are really involved? How significant in terms of the many thousands unemployed already in Canada are the few jobs at stake in Quetico? The logging operation involves about 225 individuals and this could be enlarged to encompass the mill workers at Sapawac. But how many would be completely without livelihood if logging in

Quetico was stopped? The forest industry is not being asked to stop all of its operations, just to move outside the boundaries of Quetico. There are other areas which can supply the Sapawe mill and employ the loggers who are accustomed to moving from camp to camp. There is a responsibility on the Government of Ontario to find alternate employment now and in the future for those involved.

We also feel sure that considerable economic benefit will come to the district and its residents once it is known that Quetico is a genuine wilderness preserve.

In summary, then, Quetico Park is not a crucial source of timber and it is not necessary to log it. The economic considerations are based on a temporary convenience rather than on a valid need. The economic value of the Quetico forest is challenged in perspective of other values, such as scientific and aesthetic ones. The loss of jobs by some individuals is regrettably necessary and must be minimized by Government means of action. The people of Ontario, we feel, will permit a small economic loss in order to save that which is "for the benefit, advantage, and enjoyment" of their own and future generations.

4. EDUCATIONAL CONSIDERATIONS

As teachers, we are dedicated to providing the finest possible education for the youth of our province. We are becoming increasingly aware that classroom learning, in physical isolation from the world outside, is not providing the quality of education which our youth need to cope with modern society and its problems. Realization of this fact has led to a large scale movement, during the last decade, of school activities into the outdoors. This movement is rapidly gaining momentum.

Five years ago, few (if any) schools used Algonquin Park for camping trips and field studies. Now, dozens of schools

in the province use that park regularly as an outdoor classroom. Quetico also is being utilized for the same purposes by schools in Atikokan and Thunder Bay. As we become increasingly mobile, Quetico will become readily accessible to schools throughout the province, just as has Algonquin.

Every student has the right and, in fact, the need to be exposed to an undisturbed wilderness area. Exposure alone, however, is not sufficient. There is the need for total immersion within and travel throughout such an area, if a student is to obtain a true understanding of what an undisturbed natural environment is like. Hence, the need for a relatively large contiguous area, such as Quetico. Unfortunately, Quetico is the only reasonably accessible area of that type that remains in Ontario.

Wilderness represents the highest standard of environmental quality. If our youth cannot experience such a wilderness environment, how can we expect them to solve in the future the growing problems of pollution and other forms of environmental deterioration? They will have no standard to work towards, because they do not know what constitutes an ideal standard.

Just at a time when teachers are realizing the vital need for outdoor educational experiences, we see the last of our wilderness classrooms, namely Quetico, being slowly destroyed. It seems ironical that a provincial government which appears to be concerned about the education of its youth and which spends millions annually to this end, will knowingly destroy a unique and priceless classroom, one which can never be replaced.

CONCLUSION

This brief represents the considered judgment of the group of 75 persons described in the Introduction. It is our sincere hope that our case has been presented with sufficient clarity that due

consideration will be given to the reclassification of Quetico Provincial Park as a Primitive Park.

Respectfully submitted to the Quetico Advisory Committee by:

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(c/o Prof. W. A. Andrews)

Written by: David Coons
Larry Dohle
John Jefferson
David Lea
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BRIEF SUBMITTED TO THE
QUETICO ADVISORY COMMITTEE
OF THE ONTARIO DEPARTMENT OF LANDS AND FORESTS

Emil O. Frind, P.Eng.
147 Euclid Ave.
West Hill 782, Ont.
February 25, 1971

1. Our Province of Ontario is indeed fortunate to be blessed with an abundant supply of natural resources. These resources and their utilization have enabled us to achieve, present economic difficulties notwithstanding, one of the highest standards of living in the world. We are beginning to realize, however, that this desirable condition has also required some sacrifices. We see now that striving for a high rate of economic growth has led to pollution and damage to the natural environment. It appears that all too often we have paid for an advance in the material standard of living by a corresponding decline in the quality of life. We now have more material comforts but less clean air and water, and our surroundings are less pleasant than ever before. Although efforts are being made to combat pollution, these efforts must be futile in the long run if we persist in our policy of economic growth at any cost. Must we forever continue to raise our standard of living at the expense of the quality of life ?

2. The use we make of our Provincial Parks is a good example of this conflict. We can use a park as a forest resource and increase the standard of living in the Province somewhat by converting the timber into marketable products. Or we can use it in its natural state where it can provide, to those who seek it, the high-quality recreational experience found only in wilderness travel. Wilderness travel affords a respite from the pressures of urban living; it provides the opportunity for physical as well as spiritual regeneration and helps to preserve some measure of sanity in this hectic world. A wilderness park can thus yield large benefits not measurable in terms of dollars and cents. Logging the same

park may provide employment for a few, but will lower the quality of life for many.

3. The Provincial Government, although asserting that recreation is the primary use of our parks, seeks to use them for both recreation and commercial purposes. However, a wilderness which has been or is being logged is no wilderness anymore. Mechanized operations inevitably cause, although on a lesser scale, the same kinds of pollution which presently afflict life in urban areas. After completion of logging operations, ugly and long-lasting scars are left behind. The topsoil, which has formed slowly over the centuries, and is very shallow particularly in Quetico, may be disturbed sufficiently to cause instability and subsequent erosion. Logging access roads, apart from their unsightliness, pose a threat potentially more harmful than logging itself, as there is always the possibility that they may at some time be "improved" and opened to the motorized public. This would effectively destroy the wilderness forever. Thus it is evident that logging is incompatible with the concept of wilderness parks.

4. It can be said that those who desire to experience the wilderness in an unspoiled state are a minority. Taking an historical perspective, however, we find that only in the fairly recent past, very few placed any value on natural beauty or the aesthetic qualities of the environment, and wilderness was something to be conquered and subdued. Today, sufficient numbers of people are concerned with these aspects to cause controversies, a fact which the Advisory Committee will be well acquainted with. In the future, as affluence and sophistication of Canadians rise, the appreciation of and need for unspoiled wilderness will unquestionably rise also. Since the value of a resource varies with the demand placed upon it, it seems certain that a few years hence the aesthetic value of a wilderness park as such will far exceed the commercial value of the timber contained within its boundaries. Rather than exploiting them now, we should therefore protect our wilderness parks more effectively.

5. Is the need for forest products of such magnitude that we must use Quetico timber to satisfy it? At the present there

is no evidence to suggest that we cannot fill this need from other sources. In the future the demand for paper and paper products will likely increase, yet the amount of land capable of producing suitable timber is, with or without Quetico, finite. Inevitably, a point will be reached at some time where even the sustained-yield management of all available timber lands will not be sufficient to satisfy the demand. On the other hand, the disposal of waste such as used paper products is already today causing serious problems. Clearly the only long-range solution to both the supply and the disposal problem is to tie the two ends of the process together and recycle all materials. Hence the pulp and paper industry should be encouraged to find, with Government help if necessary, efficient ways to process waste paper into new paper products. This would ultimately reduce the pressure on our precious parklands, curb the pollution caused by present pulp processing methods, and eliminate the waste disposal problem.

6. Quetico Provincial Park represents only about 0.4% of the total land area of Ontario. While there are other wilderness areas existing within the province, these are mostly inaccessible to the ordinary citizen. Also, very few areas possess the unique beauty of Quetico, which is advertised by the Ontario Government as "one of the last great primitive areas on the continent" and "the largest accessible wilderness canoe area in North America". With Algonquin and Lake Superior Provincial Parks already being extensively logged, it would be deplorable if we could not afford to preserve this small portion of our province which is Quetico. The Provincial Government should not only take steps now to preserve this magnificent park in a reasonably unspoiled state, but should also cooperate with the Federal Government in setting aside and protecting, as National Parks, some more significant parts of the province for the use of future generations.

7. In consideration of the above points, I am of the opinion that Quetico Provincial Park should be reclassified as a Primitive Park. Accordingly, timber licences should be revoked and present logging operations should be phased out.

MILLWRAITH FIELD NATURALISTS



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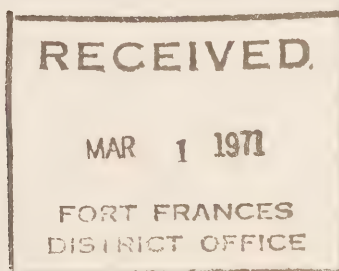
24th February, 1971.

we, the Millwraith Field Naturalists of London, Ontario, wish to submit as our brief extracts from the paper "Significance and Future of wilderness-Type Outdoor Recreation in Ontario. Quetico Provincial Park, A Case Study" by Lawrence Edward John Draho. We believe that this paper should be read in its entirety by your Committee, but in the meantime we hope that you will consider the appended extracts, which we believe express the opinions of many citizens of this Province.

It is our considered opinion that tourism can become an acceptable alternative to logging as an income producer for those living in the vicinity of our parks. In addition, we believe that those of us who prefer wilderness to civilization should be, and are, prepared to pay an economic fee for the right to enjoy this wilderness.

Finally, we would like to thank you for giving us this opportunity to express our views.

(Mrs) R W Tracy
Chairman, Conservation Committee



REQUIREMENTS AND FACTORS
INFLUENCING WILDERNESS RECREATION

The great historian Traveleyan said: "We are children of the earth and removed from her our spirits wither."¹ We have only to look at man today to realize what he meant. Torn by new ideologies and dissensions, confused, assailed by influences never known before, man is living in an environment which has lost many of its basic satisfactions, rewards, and ecological balance. With increased urbanization our urban areas will not only be larger and more concentrated in the number of human beings, but they will magnify the social ills already apparent. In the United States, for example, delinquency and crime are increasing five times the rate of population growth. Dope addiction, alcoholism, and neuroses are on the increase. In 1964 the United States spent \$245 million for tranquilizers and \$172 million for sleeping pills, and drank 216 million gallons of hard liquor; 50% of the hospital beds were occupied by mental cases. Every one of these manifestations was an escape from a complex, overcrowded kind of living.²

Modern man is sadly mistaken if he thinks that he can build his "Utopia" entirely within the confines of an urban complex divorced from

¹S. F. Olson, "A Philosophical Concept For National Parks," The Bulletin of the Conservation Council of Ontario (January, 1963), p. 14.

²Spencer Shaw, "Today's Unsolved Problems - Tomorrow's Crises," Parks & Recreation (January, 1965), p. 31.

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natural surroundings. In order to live, he requires space, primitive beauty, and a semblance of unchanged nature and simplicity. Such places as Quetico and other wilderness-type environments cannot help but become increasingly important as our population increases and our natural areas dwindle and finally disappear. The real function of wilderness areas will be humanitarian in purpose, cultural in impact and philosophical in nature.

Our task is to preserve an environment where man can still find enrichment for his spirit. We must not allow ourselves to be easily swayed by economic and political pressures in preference to considerations of beauty and values associated with basic spiritual needs. The former (political and economic pressures) are usually measured in dollar and cents, but there is no yardstick for the latter. We must look upon wilderness-type environments as necessities. The task of preserving such areas as Quetico, Algonquin and Killarney Provincial Parks, for wilderness outdoor recreation, is extremely important in an age where we have the power to destroy our living space. Our biologists, planners and other professionals, should speak out directly and frankly on what they know about evolving controversies that concern our environmental problems. Our biologists, for instance, should not assume that their scientific papers and detailed knowledge about ecological impacts, etc., are reaching the decision-makers, or having an impact on the top people in government. These professionals should offer their information as soon as it is available, in a form that is understandable and logical to people with practical minds.

As Stewart L. Udall, Secretary of the Interior of the United States, put it in 1964, "History has shown us that no great social goals have ever been achieved until the need for them was sufficiently understood by the man in the street."

REQUIREMENTS FOR WILDERNESS RECREATION

Management decisions concerning land and people, that comprehend the basic requirements of wilderness recreation, are extremely important for the retention of opportunity for wilderness recreation in the future.

Present descriptive literature on wilderness recreation areas implies availability in those areas that exhibit the following characteristics. Areas not open to mechanized travel such as automobiles, motorcycles, motorboats, aeroplanes and helicopters. Areas which are relatively uncrowded and present frequent opportunity for isolation. In addition, potential wilderness recreation areas should be relatively unmodified by: utilization, commercial developments, private land holdings and management activities, including extensive construction of primitive facilities for recreation use. Finally, extensive water and land acreage in units without roads or boundary indentations, appear to be desirable qualities. Do such potential areas exist in Ontario? There are large blocks of commercial forest land in Northern Ontario, which are held under

timber licences, where the only sign of civilization is associated with logging operations. These areas could conceivably provide an excellent opportunity for wilderness travel. A factor in favour of the establishment of large wilderness areas in Northern Ontario is the fact that most of the land is Crown land belonging to the Province. In addition, it is a vast area very thinly populated and thus, could provide an excellent opportunity to enjoy the solitude which is cherished among wilderness values. Perhaps some type of agreement could be made with the forest industries to allow wilderness travel on the lands that they control by timber licences. This possibility should be looked into.

FACTORS INFLUENCING RECREATIONAL USE

Since prevention of recreation overuse is now a major problem in several wilderness areas in North America, and promises to be an enigma under current trends for other areas, the writer hopes that the following brief description of factors controlling the amount and kinds of recreational use will illustrate the diverse components of this problem.

The amount of recreation use in any wilderness area is directly related to distance from urban areas. Characteristically, wilderness less than a day's drive from major metropolitan centres receive the most recreational use. Needless to say, highways which provide urban areas with rapid auto transportation to the general region of wilderness areas significantly increase wilderness recreation use.

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In the United States, an increasing number of commercial horse and pack outfitters, and aeroplane and boat services, are now depending on wilderness areas for a considerable part of their business operations.¹ Problems arise from the fact that once initiated, facility construction and motorized travel tend to expand and create conditions inconsistent with the purposes of wilderness reservation.

The publicity given to wilderness areas in newspapers, magazines and books containing discussions of specific areas, frequently cause an upsurge of use.

The factors described so far influence wilderness recreation from outside the wilderness area. Let us now discuss some of the factors which influence wilderness recreation from within wilderness areas. The condition, number, and location of trails, for instance, can control the distribution and amount of recreational use. Area size is also very important. Ordinarily, the amount of recreational use is light in interior portions of the largest areas, and under current trends these zones may be the only future places left for optimum wilderness recreation.

Often mining claims and private lands are developed for commercial or private recreational use. Consequently they are important factors. If located conspicuously along sites suitable for public camping or travel routes, these developments can remove the impression of wilderness.

SUMMARY AND SUGGESTIONS

Despite the apparent public enthusiasm for large wilderness-type parks such as Quetico and Algonquin, these have been losing their wild quality for lack of adequate protective legislation. In Ontario we have 95 provincial parks of which five might be classified as semi-wilderness in character; namely, Quetico, Algonquin, Killarney, Sibley and Lake Superior. However, none of these are protected for primitive means of travel only (by canoe, snowshoe or foot), nor is commercial logging (which sometimes wreaks drastic and long-term changes in the ecology) excluded from them. For instance, Quetico has car and trailer camping, a large commercial timber-cropping operation, and motorized traffic on many of its lakes. The Trans-Canada Highway passes through Lake Superior Park, and both Killarney and Sibley Parks will emphasize multiple use. In essence, we have no fully protected wilderness park in Ontario.

With the above in mind, we might question why Quetico Provincial Park was categorized as a Natural Environment Park under the new classification system announced by the Minister of the Ontario Department of Lands and Forests. ~~Quetico Provincial Park is a Natural Environment Park under the new classification system.~~

If the Government of Ontario is thinking seriously at all about preserving the few semi-wilderness areas which do exist within the Ontario Park system, then perhaps they should consider re-classifying these semi-wilderness parks to primitive parks. In addition, if the government ever hopes to lessen the confusion concerning wilderness terminology, perhaps the changing of the word "primitive" to "wilderness" in the new classification system would be a start.

It is imperative that careful studies be undertaken before defining wilderness zones. There is no doubt that there are limits to the amount of use which wilderness zones could support. The human carrying capacities

of such areas, consistent with optimum wilderness value however the latter may be defined, would have to be determined; and, subsequently, a system of limiting park users to this optimum would have to be developed. "Over Use" is the kiss of death to parks and it is one of the administrator's greatest headaches.

Another problem associated with present legislation regarding wilderness preservation, is management by "Order-In-Council". For instance, it is generally undisputed that mining is in direct conflict with the objectives and aims of a wilderness parkland, and yet, mining and prospecting can be permitted by the Ontario Cabinet which holds its deliberations in closed sessions. In most provinces, it is not necessary for a Cabinet decision to be published except in certain cases in the Ontario Gazette. As such, parks can be made, reduced in size, or developments can be permitted within them, without debate or advance notice to the public. Even if the public is aware, it takes time to mobilize and make representations and that time is often non-existent. The seriousness of the situation is in the finality of the decisions, for example, trees cut down cannot be put up again. In the interest of the public, justice, and wilderness preservation, proposed orders-in-council relating to parks should be given publicity well before any decisions are made final. In addition, the public should be allowed to make representations.

All of these needs and questions demand profound and immediate consideration. Perhaps the greatest of these is the need for a co-ordinated plan for the future. Our pattern of open spaces and parks is extremely fragmented and multi-layered. Federal, provincial, regional and local bodies all enter into the Ontario parks picture. There is an immediate need for these agencies to co-ordinate their planning and work together within the framework of an intelligent overall design. If they do not, Ontario will never emerge from its present state of chaos in the field of wilderness-type outdoor recreation and outdoor recreation in general. The road toward the ideal will obviously be fraught with all sorts of difficulties both political and otherwise.

~~CONFIDENTIAL~~

SUMMARY: CONCLUSIONS, PROPOSALS, IDEAS

If there are to be wilderness areas in the future, then the decision to preserve them must be made now before populations increase substantially, and before technical innovation cuts its swath into the heart of heretofore isolated places.

The hard technical job of organizing the living space of a future Ontario, when this country will be jammed with people, does not call for shoehorn notions that try to make a tight boot fit comfortably. What is required is a frank recognition that the landscape will be pinched in a lot of places. As such, now is the time to lay out the blueprints that will confine each pinch to its proper place. The following is a list of proposals and ideas put forth in this research paper.

1. There is no doubt that the variety of concepts and definitions used to refer to wilderness areas have obscured the real meaning of wilderness. What is required is an honest all-out effort by a senior level of government to define, adopt, and enforce a meaningful definition of what a wilderness is, and what it constitutes. It is imperative that we rid ourselves of such terms as semi-wilderness, etc., or we shall remain forever mired in a cesspool of meaningless jargon and terminology.

2. It is imperative that a statutory plan for Quetico, and other semi-wilderness and primitive parks, be adopted and enforced. These plans should not be purely advisory instruments. To be effective, they must be enforceable by law, state clearly their objectives and policies, and be devoid of "exceptions to the rules". The policies and rules of the plan should apply to all men equally, and provision should be made for appeals in cases of hardship. Any management plan for Quetico must take into consideration the management policies of the Boundary Waters Canoe Area.
3. There is an urgent need for a co-ordinated plan for the future. Our pattern of open spaces and parks is extremely fragmented and multi-layered. Federal, provincial, regional and local bodies all enter into the Ontario parks picture. There is an immediate need for these agencies to co-ordinate their planning and work together within the framework of an intelligent overall design. The Parks Integration Board is perhaps the nearest body ultimately responsible for integrating policy provisions on a province-wide basis. Perhaps they could adopt some policy statements within an overall recreation plan which could serve as a co-ordinating plan for the province.

10. Commercial exploitation such as logging and mining must be rigorously controlled or eliminated in our semi-wilderness and primitive parks such as Quetico.
11. The regulations concerning the prohibition of mining and prospecting, contained in Sections 14 and 15 of the Provincial Parks Act, should be made more rigid.
12. Changes might be proposed for the Mining Act to provide for special restrictions on mining operations in primitive or semi-wilderness parks.
13. The possibilities of buying out the existing mining and timber properties in Quetico, and other semi-wilderness parks, should be looked into by the Ontario Department of Lands and Forests.
17. There is a need for public agency reconsideration of the purposes and the philosophy of wilderness reservations: first, evaluating more stringently the relationship of recreation use to other wilderness values, and secondly, examining the loss of opportunity for authentic wilderness recreation when areas become overcrowded, or mining and logging developments occur.
18. It is essential to consider recreation use in relation to all wilderness values, in order to perpetuate wilderness recreation as well as other values of environmental contrast, scientific discovery potential, and retention of vanishing biological species.
19. Our task is to preserve an environment where man can still find enrichment for his spirit. We must not allow ourselves to be easily swayed by economic and political pressures in preference to considerations of beauty and values associated with basic spiritual needs.

30. The possibilities of developing high density recreation areas outside of our designated semi-wilderness parks should be looked into. There are for instance, many small lakes outside the Park boundaries of Quetico which might be developed for motorboat use and high density recreation. Thus, Quetico could be reserved for primitive wilderness recreation. At the same time, these other developed areas outside the Park boundaries could satisfy the motorboaters, water skiers, etc.

DEMOGRAPHIC PROFILES OF QUETICO VISITOR GROUPS

1967

	<u>"GROUP"</u> <u>TRAVELLERS</u>	<u>MOTORBOATS</u>	<u>MOTOR</u> <u>CANOES</u>	<u>MANUAL</u> <u>CANOES</u>
Number in party (median)	10	4	4	3
Median Age of male visitors	17 yrs.	32	30	23
Median Age of female visitors	18 yrs.	37	33	27
<u>Educational Levels</u>				
Post graduate studies	32%	14%	22%	29%
University graduates	12%	13%	19%	18%
Still in school	25%	4%	7%	18%
<u>Occupational Category</u>				
Professional, managerial	48%	43%	49%	49%
Skilled labour	18%	33%	21%	14%
Student	22%	3%	5%	11%
<u>Household Income</u>				
Median	\$10,700	\$13,000	\$12,900	\$13,500

^a Gordon Lusty Survey Research Ltd., Visitor Attitudes Towards Quetico Provincial Park, A Study Prepared for the Parks Branch, Ontario Department of Lands and Forests (Toronto: Gordon Lusty Survey Research Ltd., 1968)

FEATURES OF PARK MOST ENJOYED BY RESPONDENT

VISITOR CATEGORIES		"GROUP"		CANOE		CANOE		TOTAL	
Base:	all respondents	TRAVELLER	MOTORBOAT	WITH MOTOR	CANOE	215:100%	215:100%	527:100%	527:100%
	in each group	44:100%	119:100%	149:100%	215:100%	%	%	%	%
Good fishing		18	40	48	27			35	
Wildlife		11	5	14	22			15	
Plant life		2	1	1	-			1	
Fine for camping		5	4	5	1			3	
Like camping on islands		2	1	1	1			1	
Meeting nice people		-	4	-	1			1	
Swimming		2	2	-	2			1	
Fine for photography		2	1	-	*			1	
Enjoyed hiking		-	1	1	1			1	
Park offers a challenge		9	-	3	3			3	
Excellent boating, canoeing		7	3	3	2			3	
Good portage trails		7	3	1	2			2	
Appreciated lack of portage signs		7	1	2	*			2	
Liked portage signs		-	1	1	1			1	
Like to portage		-	1	-	1			1	
Natural beauty, scenery		32	29	34	29			31	
Unspoiled country		23	15	17	22			19	
Clean water, clear water		16	7	12	17			13	
Beautiful lakes, streams		5	6	7	10			8	
Many lakes		-	2	7	2			3	
Vastness of park		5	2	3	5			4	
Trees		7	3	2	1			2	
Fresh clean air		7	1	2	7			4	
Fast water, falls, rapids		11	2	2	4			3	
Rock formations		5	-	1	3			2	
Nice beaches		-	3	-	3			2	
Wonderful sunsets		-	-	2	*			1	

TABLE 3 (Continued)

VISITOR CATEGORIES	"GROUP"				CANOE WITH MOTOR 149:100% %	CANOE 215:100% %	TOTAL 527:100% %
	TRAVELLER 44:100% %	MOTORBOAT 119:100% %					
Base: all respondents in each group							
Wilderness	27	11	21	17	18		
Remoteness	7	6	5	4	5		
Wild, rugged country	11	5	7	6	6		
Uncrowded	-	7	12	10	9		
Away from civilization	14	6	5	8	7		
Solitude, privacy	16	9	15	12	13		
Quietness, peace	16	10	14	15	14		
Freedom	5	1	1	3	2		
Lack of commercialism	11	3	3	2	3		
No commercial aircraft	-	1	1	*	1		
No power boats	2	-	2	2	2		
Museum	-	1	-	1	1		
Good boat launching facilities	-	3	1	-	1		
Campsites well spaced	-	2	1	-	1		
Cleanliness	2	8	5	*	1		
Friendly staff	2	8	3	9	7		
General appearance	-	4	1	7	5		
Liked everything	2	3	3	-	1		
TOTAL	298	226	269	264	261		

^aGordon Lusty Survey Research Ltd., Visitor Attitudes Towards Quetico Provincial Park, A Study Prepared For The Parks Branch, Ontario Department of Lands and Forests (Toronto: Gordon Lusty Survey Research Ltd., 1968)



HUNTSVILLE NATURE CLUB

HUNTSVILLE, ONTARIO

Box 883,
Huntsville, Ont.,
February 24, 1971.

Mr. R.T. Thompson, Secretary,
Quetico Advisory Committee,
Ontario Department of Lands and Forests,
Fort Frances, Ont.

Dear Mr. Thompson:

You will find enclosed fifteen (15) copies of a brief to
The Quetico Advisory Committee from the Huntsville Nature Club,
re: Quetico Park.

We are a non-profit club, established in 1949 for the
purpose of mutual enjoyment and study of all phases of natural
history.

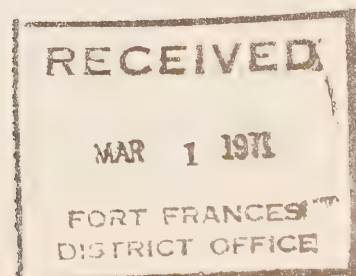
We have sixty members interested in, and dedicated to,
preservation of the environment.

Yours sincerely,

HUNTSVILLE NATURE CLUB,

President.

/vh
Enc.



B R I E F

- to THE QUETICO ADVISORY COMMITTEE
- from THE HUNTSVILLE NATURE CLUB

re: (a) re-classification of Quetico Provincial Park as Park Class I (Primitive)
(b) moratorium on all lumbering operations to prevent further deterioration
(c) extinguishing of all existing mining claims to prevent future exploitation

(a) Re-classification of Quetico Provincial Park as "Primitive"

In spite of the size and prosperity of the Province of Ontario, only one provincial park (Polar Bear) is listed under Class I, and this single park, to all intents, is inaccessible to all except by aircraft. There is, therefore, no provincial park where the ordinary citizen can come to terms with nature, equipped with only his own personal resources. A whole generation of Ontario's urban young people is growing up with no concept of wilderness and no experience in coping with the same. Quetico, in its accessibility, is in a unique position to fulfill the need for a "Primitive" park. Ecological studies, vital to further human knowledge and to provide an outlet for modern society's stresses, could be conducted therein. It is just as important that we have areas where wildlife may be given a chance to exist undisturbed and threatened species a place to rejuvenate.

(b) Moratorium on all lumbering operations to prevent further deterioration

In years past, timbering was conducted on a scale with selective features which allowed time to heal the scars. Roads were mainly winter logging roads which did not disrupt growth in a specific area. Modern roads, built to support heavier equipment, are more permanent and, in many cases, permanently block natural waterways which results in flooding and damage to future timber growth. Since forestry operations are regulated under the Crown Timber Act, and managed by foresters; it follows that their view is slanted toward timber production as opposed to preservation of a natural environment within a park. This is completely unacceptable to those of us who see parks as natural places, left inviolate to age according to the cycles of nature.

In Quetico Provincial Park, lumbering operations are being carried on at the direct expense of the Ontario taxpayer. The May-June issue of Canadian Audubon states " . . . direct income to the Ontario Government from forestry operations in Quetico is exceeded by government expenditure for forest management including partial reforestation of cut-over areas." In other words, we are paying for the

privilege of having one of the last substantial stands of hardwood butchered and shipped beyond our border. No business can operate under such conditions--how can we condone it in government? We would recommend the speedy termination of all existing timber leases.

- (c) Inasmuch as registered mining claims are current in Quetico Park, we would like to see such claims extinguished immediately and no future staking countenanced. For the sake of those trappers whose livelihood depends on trapping, present registered traplines should be honoured only while the present holders live or desire to continue. No quota system should be placed on the present licensees.

SUMMARY

Man is finally beginning to admit that there is much he still does not understand in the inter-relationships of living things. How can he learn if interference is allowed in all natural areas? Where else can scientific observation hope to establish working knowledge of such relationships except in undisturbed wilderness?

Can we not have this strategically located park, Quetico, free from commercial logging, road construction, trapping, hunting, aerial spraying, noise pollution --in fact, all interference with the balance of nature?

Huntsville, Ontario,
February 23, 1971.

BRIEF

Mr. R. T. Thomson, Secretary,
Quetico Park Advisory Committee,
Ontario Department of Lands and Forests,
FORT FRANCES, Ontario.

Dear Sir:

Re: Quetico Park

Being a resident of Ontario for many years, I feel compelled to submit my own views on this subject and respectfully request that you give them some thought.

Of the 412,582 square miles in this fair province, surely we can allow the 1750 square miles comprising Quetico Provincial Park to be set aside as a primitive park. According to the information that I could glean, most of the other provincial parks in this province have been logged--surely we should be able to have one, just one, unspoiled by logging machines, leaving God's art as it is--the rocks, the trees, the plants, the flowers, the spongy moss, the birds, the fish, the animals, and even the insects, to be just as the good Lord put them there.

Through my limited travels in this great province of ours, many roadsides show the ravages of logging machines--many lakes, through logging roads, have been opened up, bringing in countless fishermen and campers with their roaring outboards, with the resultant pollution of the landscape and waters with their garbage. Granted, campers must camp, fishermen must fish, and, hopefully, in time, their polluting methods will be controlled, logging companies must log--fully realize there wouldn't be paper to write this brief on, or newspapers to read, etc., etc., if it were not for logging companies--but surely, in this large province of ours, logging companies can do their work outside of Quetico Park. Probably this would entail more expense for them--if necessary, let them be subsidized.

There has been talk of resulting unemployment if these logging companies are thrown out of Quetico Park. Regretfully, nowadays this often happens--through Urban Renewal schemes, through amalgamation, etc.--but still these schemes go ahead on the basis of long-term benefit to the majority. On the other hand, if the logging companies be given help to facilitate their moving operations elsewhere, that problem would be solved. Is there money in this province and country of ours for everything but the saving of Quetico Park?

There's some talk of having a wilderness Quetico Park as being for just a few. Come now. Are the Universities in this province for everyone? Are the Art Galleries for everyone? Are the Museums for everyone? Was Expo '67, which cost the Federal Government (and Ontarians too, when you come right down to it) a fabulous amount of money, for everyone? Can't there be just one easily accessible spot in this province and country where a lover of the outdoors can go to enjoy the peace and quiet of the wilderness just as the good Lord made it? Millions of dollars are to go to restoring "Fort William", which surely is not for everyone. Yes, it will be a tourist attraction, but then so is Quetico--and a less costly one at that! If Quetico Park is ravaged by logging companies, millions of dollars won't restore it--only time, much time. Are future generations to be robbed of having an earthly paradise to which to escape and enjoy so that the logging companies can have their way now?

Along with countless others, I would like to see the logging companies out of Quetico NOW. AND an Order-in-Council or whatever is needed passed to see that Quetico never again be threatened by logging companies, mining companies, etc. French Lake has a campground--so let it be "French Lake Campground". At access points set up, let a quota of wilderness lovers, well-instructed in garbage disposal, etc. be given the privilege of enjoying Quetico, a wilderness Park, with a Park Patrol to guard that precious land, so that its historical, geological, natural, and whatever values it has, be preserved. The tax dollars thus spent will not go down the drain as has the money used in reclaiming the now defunct Aircraft Carrier Bonaventure.

Perhaps the wording in this brief is too blunt. If so, am sorry, but am afraid on this point feel strongly compelled to speak my mind and do hope you'll accept it on the basis of its sincerity and the fact that here we have something that can never be restored to its original state once destroyed. Part of it has been ravaged now. If the logging companies are thrown out, in time, much time, nature will take over and repair the destruction to a certain extent.

Your Department currently issues a booklet entitled "Quetico Provincial Park." Undoubtedly you are familiar with the contents of same, but let me refresh your memories on part of the

of the last paragraph on page 2.

".....It is regarded primarily as a wilderness park for wilderness recreation and is protected against any disturbance which might cause the deterioration and destruction of the wilderness environment....."

Let us take the "disturbance" (the logging companies) out of Quetico--
Let us please have our wilderness park--Quetico!"

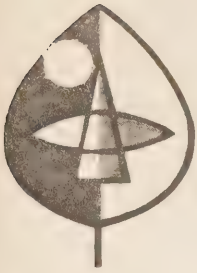
Respectfully submitted,

Eleanor Hill

Eleanor Hill (Mrs. G.)

136 Robinson Drive,

THUNDER BAY "P", Ontario.



TORONTO FIELD NATURALISTS' CLUB

The Chairman and Members,
Quetico Park Advisory Committee,
Ontario Department of Lands and Forests,
Fort Frances, Ontario.

Gentlemen:

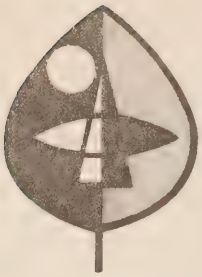
The Toronto Field Naturalists' Club appreciates
this opportunity to submit its views on the management of
Quetico Park to you.

It is our hope that you will give this brief,
and the recommendation it contains, favorable consideration.

Yours sincerely,

A handwritten signature in dark ink, appearing to read 'C. E. Goodwin'. The signature is fluid and cursive, with a long horizontal stroke extending to the right.

C. E. Goodwin
President.



TORONTO FIELD NATURALISTS' CLUB

SUMMARY OF BRIEF AND RECOMMENDATION

1. The Toronto Field Naturalists' Club is the largest naturalists' club in the Toronto area. It has a membership of over 1000 and is growing rapidly.

The Club is interested in the future of Quetico Park from several viewpoints: many of its members are also persons who value wilderness recreation; others are sensitive to the need to allow some plant and animal communities to exist without extensive human disturbance; still others believe that Canada should make an effort to set aside wilderness areas free of disturbance as part of our National Heritage. We regard the management of our Provincial Parks as the concern of all the people of Ontario.

2. In this brief we will review some of the arguments that have been introduced about the management of this park. We regard this as a useful exercise, as it enables us to come to grips with the issues that have been raised in discussion. We are making only one recommendation, on what we regard as the major principle of this matter. We recognize that if the Committee adopts this recommendation a number of other actions will also be necessary, particularly to respond to the dislocations which will inevitably result. We are confident that the Committee will recognize these problems and will arrive at an equitable settlement.

3. The stress on use of the timber resources in the Park suggests that preservation of natural areas and recreational activities do not constitute use, or at least only inferior forms of use to more economically productive activities. In fact our society does not attempt to maximize resource use elsewhere. Society is structured in such a manner that comparisons in economic terms between land set aside for recreation and other forms of land use will always result in the park land appearing as uneconomic. (Sections 1.1 - 1.4, 3.1 - 3.3)
4. The economic impact of Quetico's resources is of major significance neither nationally nor provincially. Economic exploitation of a Park's resources, however, once established, can make future management of the Park for its prime recreational uses most difficult. The management of a Provincial Park must be considered in broader terms than purely those of local economics. (Sections 2.1 - 2.4)
5. Multiple Use concepts imply a ranking in order of priority. Present park uses appear to try and reconcile basic conflicts between logging and the prime wilderness recreational use by separating them. It is questionable if this approach is logically supportable, particularly as the scale of the two uses is so different. If the attempts to exploit the Park's resources economically comes into conflict with the prime use of recreation, the prime use should prevail. (Sections 4.1 - 4.9)
6. Although careful planning of park boundaries initially would eliminate some conflicts, it is impossible to wholly predict societal trends. In our older parks, such as Quetico, the matter of boundaries is an academic one. All of Quetico is

suitable for recreation and is being used for this purpose.

(Sections 5.1 - 5.2, 8.2)

7. There appears to be consensus that wilderness canoeing is the appropriate prime use for the park. Such an activity requires an area about the size of Quetico, and its advocates tend to value remote, unspoilt areas removed from human disturbance. It is a significant fact that the majority of wilderness canoeists appear to be ranged strongly in opposition to the present park policies. These people are the prime users of the area, and their views are significant for this reason alone.

(Sections 6.1 - 6.3, 7.1 - 7.3, 8.1)

8. A diversity of recreational opportunities should be available to the people of Ontario. The Province is rich enough to provide for the needs of all of its people. Wilderness recreation is the avocation of a small minority, but a rapidly growing minority. Of its nature, this kind of recreation needs tracts of unspoiled land, just as other recreationists make other kinds of demands on society and the economy. These minimum needs should be provided for, particularly in the light of the exceptional growth in interest in this kind of activity. Furthermore, there are others both who will use and who value the qualities of a wilderness park. (Section 9.1 - 9.5, 10.1)

9. The Quetico ecosystem was historically dominated by fire. Logging is not a substitute for fire, even though the effects may superficially appear very similar. A "managed" forest for timber production has significantly less diversity than a natural stand, particularly since the timber operations remove the trees at a specific point in their development. The recreationist does not

Summary - page 4

always see the forest in the same terms as a forester, who is trained to regard it in terms of maturity and "over-maturity". A wholly natural ecosystem has value for Scientific Study.

(Sections 11.1 - 11.12)

Conclusion and Recommendation -

We have discussed some of the ideas which have been proposed in relation to the management of Quetico Park, and attempted to show that a position which advocates a management plan emphasizing wilderness or "primitive" values, is consistent with sound park management and with the public interest.

We recommend that Quetico be reclassified as a primitive park under the Ontario Parks Classification.



TORONTO FIELD NATURALISTS' CLUB

A BRIEF

BY

THE TORONTO FIELD NATURALISTS' CLUB

TO

THE ADVISORY COMMITTEE ON QUETICO PARK

The Toronto Field Naturalists' Club is the largest naturalists' club in the Toronto area. It has a membership of over 1000 and is growing rapidly.

The Club is interested in the future of Quetico Park from several viewpoints: many of its members are also persons who value wilderness recreation; others are sensitive to the need to allow some plant and animal communities to exist without extensive human disturbance; still others believe that Canada should make an effort to set aside wilderness areas free of disturbance as part of our National Heritage. We regard the management of our Provincial Parks as the concern of all the people of Ontario.

In this brief we will review some of the arguments that have been introduced about the management of this park. We regard this as a useful exercise, as it enables us to come to grips with the issues that have been raised in discussion. We are making only one recommendation, on what we regard as the major principle of this matter. We recognize that if the Committee adopts this recommendation a number of other actions will also be necessary, particularly to respond to the dislocations which will inevitably result. We are confident that the Committee will recognize these problems and will arrive at an equitable settlement.

1. Attitudes to Use

- 1.1 Some views of Quetico management have suggested that it is wasteful to devote such a large area to recreational uses alone. The argument takes a variety of forms: the timber in the park should not be "wasted"; the pulpwood from the Park is needed --

either by the local community, or region, Province or Nation; only a small number of people use the Park and the resources of a huge area should not be tied up for the exclusive use of a small minority.

1.2 These approaches seem to imply that our societal objective should be to maximize economic resource use, even if this entails some sacrifice on the part of those who place a particularly high value on the recreational and inspirational qualities of a resource.

1.3 In placing stress on the importance of economic resource use there is an implication that recreational and aesthetic values do not constitute use. Lynton K. Caldwell, speaking on the administrative Possibilities for Environmental Control, has said:

"the concept of use has been so generally understood in exclusively economic or physical terms that the preservation of undisturbed natural areas for scientific or aesthetic purposes is equated in the minds of many Americans with nonuse. The urge to extend the multiple-use concept to all natural environments, regardless of suitability, follows from concepts of economy, efficiency, and utilitarianism -- concepts that are culturally and historically derived, but which are also subject to future modification and change."

1.4 It should be also noted that maximizing resource use is not a prime societal goal in fact, although it is frequently postulated as one. Traditionally we allow the market mechanism to determine land uses. One of the central areas of concern in resources management is the insensitivity of our society to the availability and distribution of our renewable resources. For the

Province to place major emphasis on the utilization of timber on less than 1% of Ontario's forests whilst allowing the progressive elimination of the Nation's major peach growing land seems inconsistent at best.

2. The Economic Impact of Quetico's Resources

- 2.1 As much of the discussion on Quetico has been in a context of the economic significance of the Park's resources it might be useful to review this aspect briefly, and to consider the implications of economic arguments in relation to park use generally.
- 2.2 Some concern has been expressed about the impact of an abolition of logging in the Park on the economy of the Province and on the well-being of the industry. A review of the latest available Lands and Forests statistics suggests that all the major forest parks together do not represent a very substantial area in relation to Ontario's total forest land: in 1969 over 103,000 square miles were under timber license and over 186,000 square miles in timber management units. By contrast the combined areas of Quetico, Algonquin, Killarney and Lake Superior Parks is about 5,400 square miles.
- 2.3 Quetico only constitutes 1750 square miles, the logging is for pulpwood, and the workforce directly involved at present is usually stated as some 225 individuals. Hence the kinds of argument that can be proposed for Algonquin Park, where Yellow Birch represents a scarce resource and where substantial local communities are economically dependent on the park, do not apply. However, Algonquin provides a case history that should be heeded of the difficulties which can arise when a use that is presumably secondary to a Park becomes heavily

entrenched in the management of the area. Once established it becomes progressively more and more difficult to eliminate such uses without creating social disruption and causing human hardship.

- 2.4 This discussion perhaps neglects the potential economic returns of logging to the region immediately adjacent to the Park. We believe that the issues must be broader than this; as we will show in the next section, recreational demands inevitably fare poorly when balanced in economic terms against other uses. In the present case the balancing is even more difficult, as Quetico represents a recreational resource of national significance, whilst the economic returns, as we have just argued, are of very local significance.

3. Economic Returns and Recreation

- 3.1 There are some broad issues which are now relevant to a discussion in which economic considerations are balanced against recreational use. Traditionally in our society recreational land is made available to those who would use it either at a relatively nominal fee, or without charge. This applies equally to an urban park, where the value of the land is usually exceedingly high but the park area small, and to a wilderness park where the land values are likely to be low but the park area substantial. Whether or not such an approach is the best one is for this submission irrelevant; it is a social choice which our society has made and generally accepted.
- 3.2 Nevertheless, opponents of parks like to point out the economic sacrifices that parkland entails. Because their opposition is usually mounted against specific parks and not against

parkland in general, the fact that parkland will always, in our society, tend to yield less direct economic return than alternative uses for the land may be overlooked. It will probably always be possible to demonstrate that more jobs, revenue, and general economic return will accrue if a park is eliminated and put to other uses. Our society is structured in this manner, but this is not a valid argument for eliminating all parkland. Similarly it is a fallacious argument for eliminating any specific park, because it could be used with equal validity for all parks.

3.3 The same conditions apply to a park, like Quetico, which is being used for other purposes than parkland. In this case the argument only sounds different: "a few canoeists should not be able to jeopardize an entire industry." But the same principle holds: if parks are for recreational experiences, and if commercial activities are to be allowed in parks, they must not conflict with the recreational activities for which the park is intended, otherwise the parkland ceases to function as a park, at least in part.

3.4 Turning to the attitudes that question the validity of using an area the size of Quetico exclusively for recreation, again a number of different approaches emerge. One view seems to accept Quetico as a park, but hold that "multiple-use" is an appropriate policy for large parks. A second view seems to infer that Quetico is really too big, that its boundaries are more the product of historical happenstance than of careful planning, and that those parts of Quetico which are less suitable for park purposes should not be sterilized for other kinds of resource use. A third approach suggests that there

is an abundance of suitable canoeing country in Ontario, and there is little justification for setting aside an enormous area virtually for the exclusive use of wilderness canoeists.

4. Multiple Use Concepts

4.1 First it might be useful to examine the concept of multiple-use and its application. Those who espouse the multiple-use approach frequently suggest by implication that this is the usual pattern of land use in our society. In main, however, most of our land uses are of a single purpose character. It is true that much land serves ancillary uses: a pasture may control erosion and be aesthetically satisfying, but the farmer manages the land as a pasture and these other uses are little more than consequences of this land use. To achieve them no major modification is demanded of the management practices.

4.2 Multiple-use appears to be an appropriate concept when applied to a large area where a diversity of different land uses exists, yet where some overall management objectives must be achieved. In the example above, an objective of erosion control could modify the prime land uses over a wide area, and even force some to be abandoned and replaced by others. But achieving an appropriate land use would be more a matter of education and enlightened self interest than of reconciling conflicting demands. Even here, however, priorities must be established: first the erosion control needs are assessed, and in the context these provide other land uses can then be considered.

4.3 How might these concepts be applied to the management of large parks? The prime function of Provincial Parks is

implicit in the Provincial Parks Act, where it is stated that

"2. All provincial parks are dedicated to the people of the Province of Ontario and others who may use them for their healthful enjoyment and education, and the provincial parks shall be maintained for the benefit of future generations in accordance with this Act."

- 4.4 This, at least, does not seem to be disputed by anyone, and there equally seems to be agreement that recreational use should be the primary use in these parks. Clearly each park will present a network of recreational possibilities of various kinds.
- 4.5 Accordingly one could expect zoning to reflect these differing recreational potentials of the various parts of the park. In keeping with the erosion example above, one might then expect that other uses would be established on the basis of what could be allowed without conflicting with the primary recreational values. Functions such as watershed protection and scientific research might be generally compatible with almost all recreation in such areas, but commercial forestry only occasionally so.
- 4.6 In fact the application of the multiple-use idea in these areas appears to be rather different. There is zoning, but the zoning seems to attempt to balance different kinds of use as though these uses had approximately equal priorities. This gives a flavour of "having one's cake and eating it too", as though wilderness recreational values and timber harvesting requirements, for example, could each be adequately met over the same broad area, or at least met as adequately

as any reasonable person could wish.

- 4.7 It does not take much reflection to recognize that a high quality wilderness recreational experience is incompatible with a modern, fully efficient logging operation. One demands solitude, wilderness and the absence of human disturbance; the second is noisy and destructive of the natural scene. How, then, can the two co-exist?
- 4.8 The practice of multiple-use attempts to settle this question by separating the two in space. The park is large, the area being logged at any time is small, and effort is made to prevent logging operations or logged areas from becoming visible from canoe routes. Clearly this does nothing to "solve" the inherent conflict; it wholly depends upon a reasonably loose fit between the recreational demand and the area available. The more used a park becomes the more possibility there is of a recreationist encountering some facet of the logging operation. Recreationists can be excluded from Park areas where logging operations are in progress, but then the contradictory situation exists where the prime user is being excluded to allow a secondary use to proceed. Alternatively one can allow recreationists to circulate freely, and hope that they will not enter the logging area. If some do encounter logging and this experience mars their enjoyment, they will still only be a small minority of those using the park, and perhaps one could argue that they were being too demanding. But to the canoeist the matter could appear very different: depending on the impact of the logging operation he could feel cheated, disillusioned or indignant at encountering such activities in a region

promoted as a park. It is likely that much of the present conflict owes its origin to such experiences in various parks. The situation appears inherent in the management policy, for at what point does the use conflict grow too severe to be tolerated? Should one draw the line when five canoeists wish to enter the logging area? Or should the figure be ten, or one hundred?

- 4.9 An important element in this conflict of uses is significance of scale. A bulldozer running over one's lawn is likely to do an unacceptable amount of damage, no matter how careful the bulldozer operator. Like bulldozers, logging operations tend to be insensitive to minor localized destruction of the environment. The impact of forestry operations on a portage, the implications of a forest road or a bridge, may appear minor to the woodlands manager but may represent desecration to the canoeist, who is viewing his surroundings in much more detailed terms.

5. Park Boundaries

- 5.1 One solution proposed to the difficulties just discussed is to carefully establish park boundaries initially to include only areas suitable for recreation purposes, and to exclude land which might be valuable in other ways. This approach reflects the attitudes towards recreational land discussed above, where recreational uses are viewed as secondary to uses which yield more direct economic returns. More important, such an approach is largely theoretical, as it is impossible to fully predict the direction of society and of recreational trends when parks are established, and to continuously adjust park boundaries to reflect societal

swings would make a mockery of the concept of parkland as areas permanently set aside for the use of the public.

- 5.2 It is true that most large park boundaries are the outcome of a series of historical "accidents", but these considerations are irrelevant to their uses today. If sections of Quetico Park are unsuited to the recreational uses for which it is managed, then the logic of introducing secondary uses is irrefutable, but do such sections exist? One can assess the quality and potential of a park either by asking those who use it for their views, or by identifying the qualities which would render an area valuable for a particular kind of recreational use, and then inventorying the park area with these criteria in mind.

6. The Views of the Park Users

- 6.1 There seems to be no dispute that the chief recreational use of Quetico is for wilderness recreation -- principally canoeing. Such are the people who use it, and it is described in these terms by the Department itself. Hence any assessment should be primarily directed towards the needs and desires of the wilderness recreationalist.
- 5.2 We clearly are not in a position to survey park users for their views, and the only survey results available to us seem ambiguous. It is accordingly very significant to find that all the wilderness canoeists to whom we would normally turn for advice are ranged strongly on the side of opposition to present policies. In the turmoil of exchanges this fact appears to have been overlooked. The protest about Quetico has been from a minority, but the minority protesting includes those who use the park most, and who are best qualified to

assess the quality of the recreational experiences the park offers.

- 6.3 At this time some brief points should be made about the character of the protest on the Park, as it has perhaps elicited a disproportionate amount of attention. The protest has been criticised for being noisy, but the Committee will appreciate that the quality of an argument is independent of its manner of presentation. The protest has been pictured as U.S. sponsored, but an examination of the history of the organization that has spear-headed most of this protest reveals a distinctively home-grown product, in spite of the existence of powerful wilderness groups south of the International Border. Finally the protesters have been pictured as unrepresentative, but they appear to include most of the more sophisticated and aware wilderness enthusiasts in the Province.

7. The Character of Wilderness Recreation

- 7.1 Attempting to assess the quality of Quetico's recreational opportunities without recourse to the views of the users demands at least consideration of the character of the wilderness recreation and the satisfactions it offers. It is far removed from the Sunday afternoon outing in the family car. Quetico is relatively remote, even for persons in Thunder Bay. Once one has reached the Park a canoe trip in itself is time-consuming, quite arduous, uncomfortable and potentially dangerous, and is not to be undertaken lightly. It is not a mass recreation for these reasons alone, but its burgeoning popularity in the U.S., now being mirrored by a

rapidly growing interest in a populous Ontario, suggests that, for some, it offers a satisfying counterpoint to today's living.

- 7.2 People who willingly embrace difficult and arduous undertakings only do so for correspondingly great rewards.

Prime among these for wilderness lovers appear to be solitude, the challenge of pitting individual skills against the wilds, a love of the simple life and a delight in a natural environment seemingly unspoilt by mankind. It is not surprising to find a dedication to wilderness almost amounting to fanaticism among its adherents. Attempts to reduce the appeal of wilderness to words yields, not detached explanation and quantifiable data, but extracts from poetry to literature, and references to cultural heritage.

- 7.3 These are highly significant points: in the debate those favouring present policies have pictured wilderness advocates as unreasonable and unwilling to compromise, but in fact in Quetico the Province is providing a facility primarily for wilderness canoeists, and such persons typically have strong views on the absence of human interference and on the availability of large remote tracts of country. They tend to be "purists". It is irrational to provide a facility for a group and then complain that they behave characteristically. It is rather like building a road and then complaining that irresponsible motorists are polluting the air!

8. The Needs of Wilderness Recreation

8.1 How much space does a wilderness canoeist need? The Canadian Society of Fisheries and Wildlife Biologists has suggested a Park size which requires at least two days travel to cross at its smallest dimension. This seems a reasonable criterion, even if it implies a large area. By these standards Quetico is about the right size.

8.2 Is all of the Park suitable for wilderness recreation:

Unquestionably the 882 square mile Hunter Island section is the most suitable, and by the same token would probably be very difficult to log economically. The northerly section of 868 square miles is less desirable canoe country. Nevertheless the entire area contains good canoe routes, and the northerly areas are most accessible to Canadian recreationists. The north-eastern section is readily accessible from the highway, which skirts the perimeter at one point. It is also the most difficult country for canoeing, with two of the longest portages in the Park, and hence is the most lightly used. It presents a challenge to the advanced, and a potential retreat from the more heavily-used waterways in the remainder of the Park.

9. Quetico Size and Recreational Demand

9.1 Recognizing that all of Quetico has potential for recreation does not come to grips with the question of whether all of Quetico should be used for recreation. Some have suggested it is too large an area to set aside for a "small minority", particularly when most of these users are from the U.S. This is a valid proposition, but one not susceptible to a reply. One of the major challenges in this field is to

establish how much parkland is "enough".

- 9.2 It seems reasonable to suggest that the diversity of recreational opportunity available in an area as large and as rich as Ontario should at least be adequate to satisfy the varied needs of its population. For some this will mean urban tennis courts or an opportunity to moor their boat. Are tennis players or boat owners a privileged minority because society provides facilities for them which they can frequently use at very little cost to themselves? The actual land involved for each user may be quite small, but still represent a substantial cumulative investment if its location in relation to alternative uses is considered. Some recent estimates suggest that there were about as many snowmobile owners as canoeists in Ontario a couple of years ago: is society paying a higher cost in terms of noise and disruption from the users of these highly mobile machines than it would be in direct economic terms by foregoing logging in wilderness parks? Equating recreational demands is complex.
- 9.3 It is true that canoeists can pursue their activities outside Quetico Park, but they are then no longer in a position of being the prime users of the land. If the stream is clogged with debris or traversed by logging roads, and if these conditions mar their experience, they have no grounds for complaints: logging is a legitimate element in the management of our forests. Their only recourse is to move beyond the logging, but that can demand resources indeed, both of time and money.

- 9.4 Recreational demands are growing rapidly, and out of proportion to the growth of the population itself. So is membership in groups that emphasize the importance of natural environments; outdoor and hiking clubs, naturalist groups, and groups that promote preservation of wilderness. Both trends suggest that the demand for "wilderness"-type experiences could increase significantly. Further, today such experiences are the domain of the young, and ours is a youthful society.
- 9.5 Forest management is a long-term proposition, and judgements made on the basis of minorities being small today could come home to roost when the minorities are much larger and even less patient. A Lands and Forests official has recently suggested the possibility of having to "ration" park use to maintain the quality of the wilderness environment. Given present experiences in Algonquin Park this possibility seems far from remote, and it is this kind of pressure that present planning must anticipate.
10. Other Recreational Uses of Quetico
- 10.1 So far this submission has discussed the recreational use of Quetico as though it was of exclusive interest to wilderness canoeists. Some other forms of outdoor recreation, mainly fishing, blend harmoniously with the character of a wilderness park. Other people in our society also value the qualities of tranquility and undisturbed natural beauty, and Ontario is perhaps lacking in intermediate facilities which might provide these less articulate individuals access to a wilderness experience, even if only peripherally.

Those who value wilderness as an abstract idea, without ever wishing to experience it directly, are among those to whom areas such as Quetico are also important.

11. Quetico as a Managed Ecosystem

11.1 To this point the issue of the management of the forest itself -- management to maintain an ecosystem, as opposed to management for some form of use -- has been ignored. Some foresters feel strongly that a healthy forest in Quetico can only be maintained by logging. Some preservationists on the other hand argue for the maintenance of a natural ecosystem, which they claim is destroyed by logging.

11.2 There is no dispute that the forests of the region have been regulated -- managed, as it were -- over the years by fire. To suggest, as many foresters do, that logging merely replaces fire, is an oversimplification as the colonizing plant and animal community on a burn is a distinctive one, and is not duplicated in a cut-over area. But to claim, as those who advocate a "natural ecosystem" do, that absence of logging will allow the plant and animal communities to develop as in pre-settlement days, is also false as long as man insists on putting out the fires.

11.3 Many foresters are concerned about the condition they describe as an "over-mature" forest developing because they regard such forests as reservoirs of disease and sources of insect infestation which could endanger younger, commercially valuable forests outside the park. They also claim that such forests are aesthetically unpleasant. Controversy exists on all these points, with other qualified

individuals asserting that the danger of infestation is seriously overemphasized. It appears that, in a wholly natural ecosystem, fire would act as a control on disease and insect populations.

11.4 The arguments for logging as an instrument to provide control of disease and insect populations would be stronger if present management in the region did not leave large areas in their "natural state". At some point these tracts-- Hunter Island and the allowance to be left along all waterways, as well as the large protected areas south of the international border in the Boundary Waters Canoe Area-- inevitably abut commercial operations. It would seem these areas would be as susceptible to disease and infestation as areas further north. If the area to the north was being commercially logged, then it would be "endangered" by these areas; if it was not being logged it in turn would "endanger" crown land outside the Park. It is difficult to see how the danger is avoidable.

11.5 Fire is a more complex matter, and at present all fire is suppressed. The techniques necessary to circumscribe a forest fire to a specific area are not available, so a continuing policy of fire suppression seems inevitable, at least for the near future.

11.6 Hence the wholly natural ecosystem desired by those who wish to see the Park "preserved" is also unattainable. Is there any scientific basis for the argument to preserve the Park as a natural ecosystem?

11.7 A plant ecologist recently described the Boundary Waters Canoe Area as a "gigantic ecological experiment". It is difficult to view the subject in any other terms. Recognizing that man is going to play a fundamental role in the management of any forest in the region, are there compelling reasons for selecting one kind of role over another?

11.8 The economic arguments have been dealt with at length, and they have here been consistently weighed against the prime use of the Park; the needs of the recreationist. Aesthetic considerations depend on the eye of the beholder, in this case principally the wilderness traveller.

There is no evidence to suggest that such persons share the antipathy of many professional foresters towards "over-mature" forest or, for that matter, burnt areas.

Naturalists, certainly, do not share these professionally engendered views in the least. There is another use that is largely compatible with wilderness recreation but incompatible with logging. Quetico Park represents a network of plant and animal communities, the specific community dependent upon the age of the forest, the character of the soil and a multitude of other factors.

In the absence of extensive human disturbance these communities interact dynamically, and they develop in a direction dictated by this interaction and by the impact of their total environment. Elimination of fire removes a major factor from the environmental equation, but otherwise it allows the forest to continue its progression unchecked.

- 11.9 A laboratory is provided which allows the ecologist to examine the dynamics of natural communities. The dynamics of plant succession can be studied. The concepts of climax communities tested and their energy balances measured. Populations of large mammals interacting together in the absence of serious human disturbance or predation can be watched. Large areas are necessary for such purposes, and increasingly few such areas exist. Any large region presents a network of habitat types and plant and animal distribution will be discontinuous; at the top of the food chain the winter ranges of major carnivores such as wolves have been measured in areas ranging from 50 to over 200 square miles. Looked at in these terms Quetico is not very big.
- 11.10 Timber harvesting, by contrast, automatically terminates the ecological experiment when the forest arrives at the stage of being what the forester describes as "mature". This is a particular stage in the growth of a particular group of trees; the sequence is arrested and the process begins again.
- 11.11 With fire, a patchwork quilt of communities resulted, with some parts of the forest reaching great age and others recently burned. A place was provided for a wide range of plant and animal species, from those adapted to colonizing charred ground to those adapted to living in old forests and dead timber. Much of this variety is extinguished in a "well-managed" forest.

11.12 There is good reason to attempt to withhold parts of our world in a natural state. Natural ecosystems are poorly understood, yet their dynamics could be of vital significance as man's impact on his environment grows increasingly all pervasive. Ontario is probably one of the richest regions in the world today: if we cannot afford to dedicate some part of our land mass to such purposes the cause is probably hopeless.

Conclusion and Recommendation -

We have discussed some of the ideas which have been proposed in relation to the management of Quetico Park, and attempted to show that a position which advocates a management plan emphasizing wilderness or "primitive" values, is consistent with sound park management and with the public interest.

We recommend that Quetico be reclassified as a primitive park under the Ontario Parks Classification.

THE OSHAWA NATURALISTS' CLUB

BOX 354, OSHAWA, ONTARIO, CANADA



"Conservation through Education"

R.T. Thomson,
Secretary,
Quetico Advisory Committee,
Department of Lands and Forests,
St. Francis, Ontario.

Dear Sir,

It is our opinion that the citizens of Ontario are entitled to have some areas of this province remain free from commercial exploitation, or development for intensive recreational use. We further believe that Quetico could be one of these areas. In our society of ever-increasing pressures, urbanization and complexity, places of quiet and solitude where nature is still relatively undisturbed play an increasingly important role. Some people require natural places where they can escape the noise and hurry of everyday life at least long enough to think, and perhaps gain a new perspective on their lives, and renewed purpose and energy. Quetico is such a place and we believe it should remain so.

The people of Ontario are very conscious of the lack of National Parks in this province, and the reluctance of the Ontario government to make available suitable areas of land for their establishment. They will be extremely critical of a government which allows the only remaining comparable area in the province to be destroyed.

Arguments used by the timber interests in the Algonquin controversy are generally invalid with respect to Quetico. However, lest they be repeated as plausible, let us put some of them in perspective:

Argument 1: This area must be lumbered because there is no other suitable source of the kind of timber provided here.

Reply: According to a Department of Lands and Forests publication, the Ontario Resources Atlas, Fourth Edition, June 30, 1963, page 6, Quetico is not an area rated as highly productive of any timber type. In fact the main function of the forests of this area is stated as the "protection of shallow soil landscapes".

Argument 2: The revenue from timber leases is a valuable source of income for the province.

Reply: In an article from the Toronto Globe and Mail, October 5, 1970, this information is given on the matter:

"A Department of Lands and Forest spokesman said that the Department receives about \$15,000,000 annually from the companies cutting wood in Ontario. He said that his last figures showed that \$16,000,000 was spent last year in Ontario in the timber management program which includes replanting."

It would appear that rather than gaining revenue, the people of Ontario are actually subsidizing the lumber companies by a million dollars annually.

Argument 3: Wilderness should be provided "farther north".

etico is 'farther north'. Polar Bear Provincial Park scarcely provides a reasonable alternative to a family on a two-week summer vacation, for a number of obvious reasons.

Argument 4: An unlogged forest becomes an unattractive, aesthetically displeasing 'silvicultural slum', which is a fire hazard and dangerous and difficult to travel through.

- Reply: (a) This argument is not substantiated in National Parks where logging is generally not carried on.
 (b) In an area where the soil is shallow and forest cover provides protection, surely it is reasonable to maintain this cover as undisturbed as possible.
 (c) Interior travel in Quetico is largely by canoe so that fallen trees would not prove to be great obstacles.

Argument 5: Those who work in the forest industry would lose their jobs.

Reply: Since logging is not of long standing in Quetico, permanent communities have not yet developed dependent on the industry. Therefore other limits can be provided elsewhere for the companies concerned, thus providing employment for their workers.

Argument 6: Multiple-use should be practiced on all forest lands. They can be used by recreationists and lumber companies alike.

Reply: Logging and wilderness are incompatible. To ask someone seeking peace and solitude to coexist with a logging crew is like telling a trout fisherman to go fishing in a stream which is also being used for dumping industrial sewage. The opportunity still exists, but the qualities which make the experience a worthwhile and valuable one have been destroyed. The multiple-use concept is a useful one, but it not and should not be universally applied to all lands and all land uses in the province.

Mining is another encroachment on the wilderness which is contrary to the Provincial Parks Act, and should not be permitted in Quetico. Any disturbance of the forest cover associated with mining would do irreparable damage in an area of such shallow soils.

Let it be that logging, mining and other exploitive commercial activities not be permitted in Quetico.

The Oshawa Naturalists' Club,

Margaret Henry

Margaret Henry
President

JOHN LAFARGE HOUSE

6 SUMNER ROAD

CAMBRIDGE, MASS. 02138

February 27, 1971

QUETICO BRIEF

I am writing to urge you to designate Quetico Provincial Park as a Primitive Park rather than as a Natural Environment. I urge you to do so to protect Quetico as a unique natural resource in North America. Look at the spread of lifeless concrete and noxious fumes across our continent and then you will realize what a rare and rich thing Quetico is. I have relished it during two of the last three summers, and I intend to return there in future summers; the days I spent on the lakes (McAlpin, Cirrus, Walter, Quetico, Jean, etc.) were glorious. The water, the trees, the air, the rock formations -- all of these things combine to make Quetico a rich place. I live in a noisy, grubby city all year round, and so I look forward to the unique blessings of Quetico. AND I WANT TO SEE QUETICO'S WEALTH PRESERVED.

The Park is endangered by loggers and by users of motorized craft. The loggers destroy the Park in two ways: First, by cutting the oldest, largest birch and pine they rob the Park of one of its treasures. All trees are not the same. A wooded area needs both old and young trees; the loggers upset this balance by taking down the older ones. Second, the loggers ruin much of the natural beauty by cutting ugly swathes through the countryside for roads. The soil cover in the Park is shallow and this kind of abuse damages the delicate ecosystem. The roads also open the Park to those who want to drag in motor boats or to drive their snowmobiles.

JOHN LAFARGE HOUSE

6 SUMNER ROAD

CAMBRIDGE, MASS. 02138

QUETICO BRIEF (continued)

How many square miles of forest area are there in Canada? What percent of the total is the forested area in Quetico? I would guess that Quetico is about 1/10 of 1 %. Given this, and realizing the loggers' abuse of the Park, I urge that logging operations in the Park be banned.

People using motorized craft in the Park also abuse it. As I canoed the lakes I noticed this: the lakes which are accessible to motorized boats have been littered much more than the ones which are not. Quetico, Jean, Sturgeon, for example, have many more beer cans, newspapers, broken glass, etc. than Walter, Halliday, McAlpin, etc. This circumstantial evidence is corroborated by another observation: Because a canoeist makes several long portages in his travels, he carries as little gear as possible. This rules out canned beer, unless he likes to drink it lukewarm! Because they are flown in and because they have short portages, if they have any, "motorists" bring as much of "civilization" with them as possible and they leave it behind them to decorate the wilderness.

There are many lakes in the Atikokan region which those who do not want to canoe can use for fishing. Why should the Park be abused by those who do not appreciate it? I urge you to ban motorized craft from the Park by declaring it a Primitive Park.

One final word: I beg you to not underestimate the importance of your work and the value of Quetico. Making it a Primitive Park will protect it from those who, ignorant of its richness, will turn it into a city park full of scrawny trees and empty cans.


Rev. John Kimball Kehoe, S.J.



NORTHERN ENVIRONMENTAL COUNCIL

Duluth, Minnesota 55802

February 25, 1971

Hon. R. T. Thompson, Secretary
Quetico Advisory Committee of Ontario
Department of Lands and Forests
Fort Frances, Ontario, Canada

Gentlemen:

We will greatly appreciate it if you will include this plea for the Quetico in the testimony of your committee hearing on March 1, 1971. This plea represents the thinking of two organizations, the NORTHERN ENVIRONMENTAL COUNCIL and the FRIENDS OF THE WILDERNESS. I write as the Executive Secretary of FRIENDS OF THE WILDERNESS and as Chairman of the LEGISLATIVE COMMITTEE of the COUNCIL. I was one of the organizers of the Council and have served as Secretary of the Friends of the Wilderness since its beginning in 1949, without remuneration or pay. I also have traveled the Quetico since 1909, when it was first set up as a Forest Preserve. Those were the days when it was a real wilderness, you could paddle for two to three weeks without meeting a soul or if you did, they were Indians. And when you met a canoe party, you always got around the fire, exchanged the latest news and grub that you were either short of or over supplied with. Those days are gone forever - that is, where did you not have to look for a campsite until 4 or 5 in the afternoon - go ashore, pitch your tent, start a fire, hang the coffee pot, peel a few potatoes for Supper, and hang over your fire, jump in your canoe and paddle out into the lake and catch a fish for supper, while the spuds and coffee were cooking. Now, if you don't start looking for a campsite right after your

Lunch period, you are liable to find yourself pitching camp in the dark, and if you want fish for Supper, you had better start fishing in the morning. Those were the days when the Quetico was peace and quiet, and the Timber Barons were slaughtering the wilderness on the American side from Ely and surrounding territory all the way up the International Boundary to Little Knife Lake. They even jumped across the Boundary and out on the Canadian side, until they were caught. After that, the Canadian Government sent two men to Basswood Lake to patrol the International Boundary and help keep the Timber Barons on their side of the Border. Their names were McLeod and Smith. I made twelve canoe trips in the Quetico last summer and I know a little bit of what I am talking about.

The Northern Environmental Council and Friends of the Wilderness are voluntary organizations, with many thousands of members throughout the United States and Canada. The bulk of our contributions are in the individual memberships and contrary to statements you are sure to receive from the logging and industrial organizations, we are not the well-to-do class, we are the so-called little people and most of our memberships are the young. It is the young and the generations of tomorrow for which the Quetico must be saved. The Northern Environmental Council consists of 32 organizations located in Minnesota, Wisconsin and the Dakotas.

We have studied the Quetico problem thoroughly and we wish to emphasize the very great immediate need for the preservation of this great natural resource. We say this because of our bitter experience in trying to protect and preserve the unique Minnesota Wilderness Canoe Country, known now as the Boundary Waters Canoe Area - a bitter experience extending over 45 years of constant struggle. This canoe country, besides being one of the choicest wilderness regions in our Nation, and absolutely unlike any other in character,

is also the closest, by far, to the center of our population. Thus, the successful rewards of potential exploitation are very great. Our area has been under intermittent attack by people, organizations and other, seeking to circumvent or overthrow the U.S. Forest Service's Wilderness regulations, since at least, 1926, when the first Roadless Area restrictions were set up. Our Congress has intervened directly to protect and preserve and consolidate this Wilderness Canoe Country several times, first and fundamentally back in 1930 when it prevented, with the Shipstead - Newton - Nolan Act, piratical wholesale flooding of thousands of miles of shoreline by timber companies and pulpmill operators under the guise of waterpower development. These shorelines were in both the Quetico and the Superior Forests.

Without this direct intervention of Congress more than a generation ago, this matchless natural area - which is also uniquely rich in historical associations dating back to before the French and Indian Wars, and these same historical associations are more pronounced in the Quetico, would have been destroyed, for completely superficial reasons, long ago. But this one act, back in 1930, was not enough to discourage other exploiters who have seen, in this very choice public land, manifold opportunities for getting rich quick. They have been biting at it ever since, with roads, airplanes, air-service resorts, court actions, timber contracts, legislative campaigns, and fait accompli. Only constant vigilance and struggle on the part of dedicated men, both lay and in the public service, conservation organizations, women's groups, garden clubs, sportsmen organizations, and many others, including the Minnesota State Legislature, and further intervention by the Congress, and the Executive Branch, have kept the Canoe Country from succumbing.

I mention this history of the Superior National Forest Wilderness Canoe Country because the Quetico, and every other choice wilderness area that

is reasonably accessible is going to come under the same tremendous pressures for exploitation sooner or later. Many, besides the Superior Wilderness Areas here in the United States, have already begun to experience them.

Our population, and yours, are increasing at a rate that was considered fantastic 25 years ago. Our mobility and leisure time are increasing even faster. And now, they are talking of the four day week; four days of work, three days of leisure. The pressures that have besieged our unique Wilderness Canoe Country for almost 50 years, are just around the corner for the choice Wilderness area in Canada.

The story of the struggle to preserve the Wilderness Canoe Country here is a case history of what will increasingly confront all wilderness regions in Canada, without exception, in a matter of time. Why have we of the Northern Environmental Council and the Friends of the Wilderness, and others like us, felt it was so important to fight to preserve the Superior National Forest Canoe Country over so many years.

Members of these two organizations are not all residents of the region itself, entirely, though we have a large number of supporters here. But almost all of us have been in the canoe country many times, and all of us are acquainted with some wilderness or wildernesses. To fully understand a wilderness, gentlemen, you must have been there, and spent some time there, not much necessarily, but enough to gain some re-adjustment from the accustomed environment you have left, and this one that is as old as man himself.

It does not take long, for most. After all, these were man's surroundings, during most of his history. As late as a century ago, or less, they were usually a part of the daily environment of our forebearers. But now, we are in the Space Age, and what are the values of such a wilderness, today?

The values are both tangible and intangible. The tangible values are self-evident to most of us, alone transcending, in the scale of the welfare of all the people of Canada, the limited commercial values. The Quetico is one example, is a superlative experience for young people particularly - although all ages receive dividends of much the same kind. For young people it has the rewards of body building, character building, and self-reliance training, and an un-equalled opportunity to get close to and gain some understanding from nature. It has unusual ethical and spiritual values. It has citizenship values, it tends to provide an important link with your country's past, and a perception of it, that otherwise might be much slower in developing. Most of us know this from our own youthful experience in this region. And we also know that there is usually an unconscious awareness that is something like this: The Country that knows enough, and cares enough, to set aside and preserve an exceptional wilderness, like the Quetico, and gives me the opportunity to adventure in it, at really little cost, that is in the reach of almost everyone - I am proud that this is my country, and that I have the privilege of being a citizen of it.

There are also the intangible values. We have touched on some of the intangible values, above, since they tend to join inevitably with the tangible values. As I said before, to understand these intangible values of a wilderness such as the Quetico, one must experience the Quetico himself. As modern man drifts farther and farther away from his old roots in the earth, he needs more and more a few places where the natural environment survives. In an indefinable way, these are sort of spiritual reference points between the individual's earth-bound past, and a future that is increasingly distant from it.

Today, we unquestionably need such reference points, and we will need them more in the future. Our wilderness, both in Canada and the

United States, that remains actually is limited and we cannot expand it. Most of it is distant, and not easy to reach, like the Quetico, and when it is gone, it is gone forever.

Canada badly needs a National Wilderness Policy as does the Province of Ontario, and the highest purpose of this policy should be that the few remaining wildernesses be preserved in its natural state. You, our friends, should benefit by the many mistakes we have made here in the United States in the management of our limited wilderness areas, and we have just begun to wake up.

As long as the possibility of gaining, in one way or another, the use and timber of this choice public land, which belongs to all the Canadians, exists, so long will heavy, unprincipled, pressures be directed against it. Only an overall decision of the Quetico Advisory Committee and the Parliament of Ontario, can stop the kind of attacks that have menaced the Wilderness Canoe Country of the Superior National Forest for over 45 years.

We, here in the United States, have for 40 years, worked to have both the Quetico, and the Superior Canoe Wilderness preserved as a unit with international co-operation and with the same plan of management. We have finally convinced the U.S. Government Forest Service that logging in such a wilderness is not compatible with its use. They are becoming aware that recreation is just as valuable a resource as timber, and new plans are being developed in that direction. The old theory of the Shipstead-Newton-Nolan Bill of 400 foot timber strips along the shorelines has not worked out. After a few years - these strips become nothing but a mass of wind-downed timber. They are open on the Lake side, subject to heavy winds from that direction and open on the other side, where the logging has been completed - the Forest Service has taken years to finally realize this and are now admitting its a

mistake. With pollution of both our water and air, and with the various nations in Europe complaining that the smokestacks of Europe are damaging their forests, fish, birds, wildlife, beaches and water - both we in the United States and you in Canada should stand shoulder to shoulder in their solutions. Time is not on the side of humanity in these environmental problems, though man's ingenuity and intelligence are, providing they can be harnessed on an international scale. Therefore, we ask that our plea be considered and that the QUETICO PROVINCIAL PARK OF ONTARIO be re-classified as a PRIMITIVE PARK, and both the Park and the B.W.C.A. be managed by the Ontario Department of Lands and Forests and the U.S. Forest Service with wilderness and recreation its only use. This is the most critical period in their history, but under a co-operative intense management plan by both countries, these beautiful and unique areas in Ontario and Minnesota can be saved for the boys and girls of tomorrow of both nations.


May our Wilderness Canoe Country - Minnesota's greatest treasure - live unspoiled - forever and forever.

Sincerely,

NORTHERN ENVIRONMENTAL COUNCIL

Paul Lukens, Chairman

By


William H. Magie - Executive Secretary
Friends of the Wilderness

WHM:sf

sin. *M. nesota*, near peninsula Michigan

Biologist - Wisconsin State University, Superior, Wis.)

Leif Engstrom Vice Chairman
Students for Environmental Defense,
University of Minnesota, Duluth)

Herbert Bergson Secretary
(President, Save Lake Superior Assn.)

James Buchanan Treasurer
(Audubon Society, Duluth Chapter)

Martin Hanson
Arnold Overby
Dr. Charles Carsen
Milton Pelletier
Dr. Dale Olsen

Charles H. Stoddard

Sigurd Olson

Brule River Sportsmen, Inc. (Wisconsin)
Citizens Committee for the Voyageurs Park
Citizens Organization for a Sane World
(Minnesota and Wisconsin)

Conservation Committee – A.F.L.-C.I.O.
(Duluth Central Labor Body)

Douglas County Fish and Game League (Wisconsin)
Duluth Bird Club – Audubon Society
Ernie Swift Mem. Cons. Comm.

Friends of the Wilderness

Laak Walton League, Duluth Chapter
Lake Owen Property Owners' Ass'n.

Lake Superior North Shore Assn.

Minneapolis Environmental Citizens Assn.

North Dakota Natural Science Society
Save Lake Superior Assn.

Save Our Sylvania Action Committee
(Michigan and Wisconsin)

Students for Environmental Defense

(Minnesota and Wisconsin)

Superior Junior Woman's Club (Wisconsin)

THE WIDENESS SOCIETY
Twin Ports Clean Air C

Wisconsin and Minnesota

Unitarian Environmental Committee, Minnesota

United Northern Sportsmen (Minnesota)

NORTHERN ENVIRONMENTAL COUNCIL

Christie Building

Duluth, Minn. 55802

Tel. (218) 727-2424



"There is not a single body of water within the State of Minnesota that does not have to some degree presence of DDT or other hard chemicals." So says the Director of the Minnesota Pollution Control Agency... Duluth.

To some, this confirmation of widespread ravage of our environment means why try. To the Northern Environmental Council (NOREC), its affiliated conservation groups and concerned individuals it's a struggle for survival.

We can and must clean up the environment and fight to safeguard the unspoiled northwoods, lakes, rivers, wetlands and prairies of Michigan, Wisconsin, Minnesota and the Dakotas.

There really is no alternative. Either prevent further plunder and restore salvageable resources, or watch the remainder of our limited, untamed world of contrast and harmony wither and be denied unborn generations. Time is short. You must act now!

NOREC wants you to know that there is much you and others can do to save areas you may want to enjoy. Your participation and support of NOREC will strengthen efforts to:

- Enforce pollution control laws on our inland lakes and rivers and remove the threat to the balance of life in Lake Superior.
- Prevent logging and mining interests from exploiting the Boundary Waters Canoe Area of northern Minnesota.
- Save Sylvania in Michigan and other stands of virgin timber from "over-development."
- Remove the threat of Project Sanguine to northern Wisconsin's delicate ecological balance.
- Stop wetland drainage and destruction of prairies.
- Encourage conservative forestry practices.
- Minimize potential damage to our land and water resources by highway and pipeline construction, atomic power and other unregulated industrial plants.
- Establish the Voyageurs National Park — last major link in the historic voyageurs fur trade canoe route.
- Preserve the Apostle Islands — only significant archipelago in the Great Lakes — as a park in Lake Superior.

These NOREC projects are the beginning. Pollution is not an irreversible process. It is not an inherent cost to an industrialized society. And although lake pollution is not easily controlled nor a wilderness restored, we must try!

We can prevent the upsetting of the natural balance of living things by positive, intelligent and concerted



action. There's more than the life of a trout at stake... it's yours, ours and all our children yet unborn. NOREC firmly holds that the northwoods, lakes, rivers, wetlands and prairies are yours to enjoy. So enjoy them fully! Help dissuade communities, industry and neighbors who unwittingly or mindlessly lay waste nature's legacy. Send your membership to NOREC... it's not too late!

WHAT NOREC DOES

The Northern Environmental Council, working with and through its member groups and individuals follows these procedures in achieving its goals:

- Identify problems that could lead to, or which are already causing environmental degradation.
- Develop constructive alternatives to environmental problem situations to correct undesirable impacts.
- Cooperate with federal, state, local and industry officials by presenting the public interest positions on environmental conservation issues to assure maximum consideration of conservation measures in any planned developments.
- Periodically release position papers to inform the public and their elected representatives on matters concerning both beneficial and harmful proposals and actions affecting environmental quality.
- Take steps to oppose present plans in Congress, state legislatures, city halls, county boards or corporate offices where cooperation is not forthcoming from these development decision makers.

NOREC is open to membership by organizations concerned with environmental problems and to individuals seeking involvement in constructive action to preserve the natural quality of the northern woods and lakes country.

..... I (we) enclose \$..... for NOREC membership.
 Organization \$25; Student organization \$10;
 Individual \$6; Contributing \$50; Life \$
 I wish to participate actively from time to time.
 My special conservation interests are:

..... I enclose \$..... as a contribution but do not wish
 join now.

Name

Address

City.....State.....Zip

Please mail to
NORTHERN ENVIRONMENTAL COUNCIL
 Christie Building
 Duluth, Minnesota 55802

N.B. THIS IS A BRIEF!

1209 West Ogden Avenue
La Grange Park, Illinois
60525
February 25, 1971

Quetico Advisory Committee
Ontario Department of Lands and Forests
Fort Frances, Ontario

Dear Sir:

I deeply appreciate the opportunity you have given the public to address your committee on a matter of such importance as the future and survival of Quetico Park. It is with extreme disappointment that I received the news that permission for commercial logging operations, within the park boundaries, had been given. It is both unbelievable and shocking that the government of Ontario is willing to promote the destruction of Quetico Park, a park for which Ontario's government has the responsibility, the right and the privilege, to preserve and protect for the people of Ontario.

Twice I have accompanied young people on wilderness trips into this paradise of a park. The beauty of its forests, its sparkling waters, its wildlife, lives strongly in my memory. I have seen young people grow and mature, and become refined in Quetico's wild country, in a way that would not be possible for other young people of the future, if your government allows this preserve to be destroyed through commercial logging.

I ask then, that Quetico be designated as a PRIMITIVE WILDERNESS PARK, rather than as a multiple use facility, a policy which has led to the multiple abuse and misuse of Quetico.

Sincerely,

Dr. Susan Forgesen, D.V.M.

March 1, 1971

R.F. Thomson
Quetico Advisory Committee
Dept. of Lands and Forest
Ft. Francis
Ontario, Canada

Dear Sirs:

I recently read of the problems that Quetico was facing, namely the destruction of very valuable resources. My class and I feel that to totally ruin a beautiful park by logging, boating, etc., would be an extravagant destruction of nature's resources.

It is recognized that because of a smaller population in the Canadian country, over the many hundred's of years there has been far less exploitation of nature's resources as compared to the U.S.

Reckless destruction of U.S. property is a recognized fact in the U.S. Such use of natural resources, trees, water, etc., have robbed the American nation of what should have been preserved. As it stands now it is almost impossible to replace these. This should be a living example to the Lands and Forest Minister Rene Burnelle.

The reckless exploitation of these natural resources by greedy business operations should be sufficient reason for the people of Ontario to protest now before it is too late.

Sincerely yours,

Sandra Duncan

BRIEF TO THE QUETICO ADVISORY COMMITTEE

February 26, 1971

To: Mr. R. T. Thompson,
Secretary,
Quetico Advisory Committee,
Ontario Department of Lands and Forests,
Fort Frances, Ontario.

From: John H. Passmore,
Professor (Outdoor Education),
The College of Education,
University of Toronto,
371 Bloor Street West,
Toronto, Ontario.

Thesis: "Quetico Park must also be maintained as a
Wilderness Area for Outdoor Education"

One of the most important developments that has taken place in education in recent years is Outdoor Education and Environmental Studies; and it may be more than a coincidence that this new interest in using our outdoor environment as a very meaningful teaching and learning resource began in 1967 - Canada's centennial year.

Please find attached some printed material that will demonstrate the active involvement of our College of Education in courses, conferences, etc. relating to "Education and the Environmental Crises".

May I point out that one of the first school areas to establish a challenging and worthwhile outdoor program was Atikokan High School. The principal and staff of this school recognized that the Quetico wilderness areas provided a unique opportunity to teach those human and environmental values that could not be learned in a traditional school setting.

The influence and example of Atikokan's "Outward Bound" program - natural resource management course - and credit course in 'camping' - extends far beyond our provincial boundaries.

Your committee will be interested to learn that during the last three years a great many school boards, teacher training institutions, and universities have introduced highly popular programs in outdoor education, environmental science, ecology and natural resource management.

It is estimated that more than 50% of all schools in Ontario now have some kind of outdoor program; and that more than 100 teachers in the province are working as full-time consultants of Outdoor Education and environmental study programs. This represents a rather remarkable development in such a short space of time.

That is why the preservation of our Parks and Wilderness areas such as Quetico is so important for an educational development that may be uniquely Canadian.

During recent years I have had the opportunity of canoeing through many of our provincial parks, including Quetico. This is always a very rewarding experience that I would like to think could be part of every young Canadian's heritage.

Since 1965 I have also hiked over many miles of roads built by the lumbering companies through our provincial parks; and I am deeply concerned about the inevitable population and political pressures to use these roads for cottage development.

I do hope, Mr. Thompson, that this brief submission will help to remind your committee that one of the responsibilities of an educational system worthy of the name is to "prepare young people for the kind of society in which they are going to live".

There is little doubt all Canadians are going to have a great deal more leisure time in the immediate future.

In order to renew their mind, bodies and spirits our young people in Ontario must not only have

- "A place to stand"

but they must also have

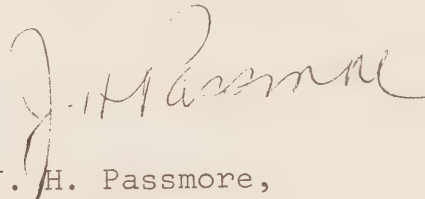
- "A place to go"!

And properly developed and protected, what a place to go Quetico Provincial Park could be for all future generations.

Brief to the Quetico Advisory Committee - page 3.

In conclusion, may I express the hope that representatives from our College of Education may have an opportunity of appearing before your committee.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "J. H. Passmore".

J. H. Passmore,
Professor,
Outdoor Education.

JHP/le

c.c. to Dean D. F. Dadson
Mr. Bruce Litteljohn

SUBJECT: Brief Regarding Quetico Provincial Park

TO: Quetico Advisory Committee

FROM: Viola Pieh

DATE: February 22, 1971

Quetico Provincial Park was established in 1913 by an Order-in-Council which described it as a "public park and forest preserve, fish and game preserve, health resort and fishing ground, for the benefit and advantage and enjoyment of the people of Ontario, and for the protection of the fish, birds, game and fur-bearing animals therein". There is great truth in the Ontario government statements that the Park is "one of the last great primitive areas on the continent" and "the largest accessible wilderness canoe area in North America". Sigurd Olson, who has served as wilderness preservation consultant to United States presidential administrations, has written, "It is the only part of the famous route of the French Voyageurs that is still as unchanged and primitive as it was two hundred years ago when the fur brigades from Montreal and Quebec traversed its lovely lakes and rivers". 1

Quetico Provincial Park is now being managed by the government much as lands outside the park--more to the advantage of the logging industry than "for the benefit, advantage and enjoyment of the people" for whom it was created.

"In 1967, the Mathieus Quetico lumbering operation was taken over by the Domtar Pulp and Paper Company which has continued to cut in the Park and which has extended the system of timber access roads. Its major access road, which has the proportions of a highway, now extends approximately 25 miles into the Park. There are numerous side roads in addition.

"Within the past several months, negotiations have begun between the Domtar and Ontario-Minnesota companies. Domtar wants to get out of the Quetico, and is offering its Quetico and area holding to Ontario-Minnesota. One of the major assets in question is clearly the limits within Quetico Park. If this deal for our parkland is concluded, Ontario-Minnesota (a wholly owned subsidiary of Boise-Cascade Company of the United States) will have 868 Square miles in the Park.

"Rene Brunelle, the Ontario Minister of Lands and Forests, in speaking of the proposed transfer, said:

"If we feel this is detrimental to the values of the Park, whereby recreation is the main purpose of the Park-- if we feel that it is detrimental, we can easily modify, we can cancel a license, or we can issue a volume agreement, or we can try to find wood outside the Park" (Legisture of Ontario debates 6 October, 1970)

"...Another publication of the Ontario Department of Lands and Forests (Quetico Provincial Park Canoe Routes) says: "It is regarded as a wilderness Park to be preserved from any development which might destroy the wilderness environment." Is modern, mechanical, commercial logging compatible with wilderness environment? ... It is not." ²

One of the arguments for the continuation of the forest industry in Quetico Provincial Park is the employment that the industry gives to local residents. "The paper mills, always a very capital-intensive operation, are rapidly becoming more so. To keep a stable level of employment in the mills, the area of forest harvested must increase at a very rapid rate".³ The new technological developments require fewer people with more technical skill. Also the numbers employed become less as the available trees are further from the mill. Tourism is one way to increase the employment of local residents. Quetico Provincial Park is an ideal area for canoe-tripping and camping. With the proper publicity and outfitting facilities, this industry would boom and hire many local residents. This would open the Park for more recreational use, hire local residents, and also alleviate the pressure on Algonquin Provincial Park.

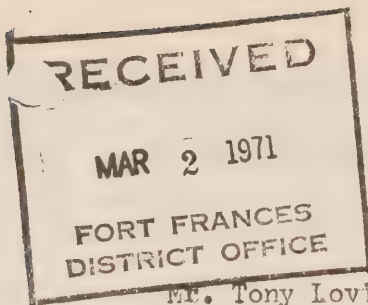
The Quetico Provincial Park should be classed as a Primitive Park. This would protect it as a true wilderness, free from mechanized equipment of any kind, except in emergencies and supervision. Its great number of small lakes and short portages make it an ideal canoe-trip area. People could enjoy true wilderness. Psychologically man needs the knowledge that wilderness does exist and that it will for generations to come. The shallow top soil and short growing season make it an area of extremely slow re-generation. By becoming a Primitive Park, the area would remain an unspoiled wilderness accessible to all.

Viola Pieh

Viola Pieh

R.R. 3, Harrowsmith, Ontario

- 1 "Canoe Country" by Sigurd Olson - North Country Magazine, Three Lakes, Wisconsin
- 2 "Quetico: Great Park or Forest Industry Asset?" by Bruce Littlejohn - Canadian Audubon, May-June 1970
- 3 "Quetico Park and the Issue of Jobs" by C.B. Cragg



the Piehs

February 23, 1971

Mr. Tony Lovink
2194 Elder
Ottawa, Ontario

*In the attention of
R. P. Thompson
Secretary of the Quetico Park
Advisory Commission
Department of Lands
and Forests
Fort Frances Ont.*

Dear Tony,

I have already submitted a brief to the Quetico
Advisory Committee. It should be in their hands.
The enclosed brief is a duplicate of it. The
names on this letter are signatures of individuals
who feel as I do about the Quetico Provincial Park.
They want their names to be submitted to the
committee. Would you see that the proper person
receives them?

Thank you.

Sincerely,

Viola Pieh
R.R. 3
Harrowsmith, Ontario

Marlene Macintosh
83 Cliff Crescent, Kingston, Ont.

Marie Good
77 McMichael St.
Kingston, Ont.

Ingrid Liel
126 Notch Hill Rd. #5
Kingston / Ontario

Alex Green
60 Sherwood Dr.
Kingston Ont.

S Perumal
4 Grenville Cres.
Kingston
B. Freeman
R.R. 1, Eganburg, Ont.
Norman J. Cohen
184, Wellington Dr. Kingston.



Ontario Department of Health

and the

Pollution, wheezing, then death No car should poison
 if Pollution Control Bill Draws Commons Acceptance
 Horror story from the sea We've built a big sewer in
 But exhaust pollution Pollution control comes under
 billowed over the Montreal smog
 However, Jean Martin
 Smoke stacks show in Toronto dustfall exceeds safety standard
 Dymond talks of
 Gov't puts teeth in pollution act
 Pollution laws called toothless by Libe
 zens may have to don oxygen
 r Times: Subtle killer in th
 Polluted water national is
 30 square miles of foul air
 Pollution Said Major Cause Of East End Power B
 most excited about air and water po
 Make anti-pollution devices on cars com

PROGRAMME

THURSDAY, JUNE 4

7:00 to 3:00 p.m. Advance Registration and Room Accommodation
Lobby of Wetmore Hall
University of Toronto
on Classic Avenue
(east side of Spadina)

FRIDAY, JUNE 5

A.M.

8:30 - Registration

9:45 C.O.E. Lobby

10:00 Opening Remarks

C.O.E. Auditorium

Chairman:

Professor John H. Passmore

Greetings:

Dean Douglas F. Dadson

Guest Speaker:

Dr. Donald Chant

"The Environmental Crisis"

11:00 Coffee

11:15 Small Group Sessions

Chairman: Prof. Bill Andrew

P.M.

12:30 Buffet Luncheon

U.T.S. Cafeteria

Hostess: Mrs. Miriam May

1:45 Discussion Groups - Phase I
with experts on Pollution and Ecology

3:00 Coffee

3:15 Discussion Groups - Phase II
with experts on Pollution and Ecology

5:30 Hospitality Gathering - Snack Bar
New College (Wilson Hall)
Hostess: Miss Joan Rume

P.M.

6:30

Dinner
New College (Wilson Hall)
Main Dining Room

Chairman: Mr. John Butkovich
Speaker: Mr. Donald Collins
Chairman, Ontario Water
Resources Commission

8:00

Films and Visual Aids

New College (Wilson Hall)

Theatres No. 523 and No. 524

Chairman: Mr. Peter Robertson

9:30

Social Hour - Snack Bar

New College (Wilson Hall)

SATURDAY, JUNE 6

A.M.

9:00

General Session

C.O.E. Auditorium

Chairman: Dr. Robert Goode

Panel Discussion

Resource Personnel from

Government - Industry - Education

10:30

Coffee

General Session - C.O.E. Auditorium

Chairman: Mr. Douglas Kearn

"Education and Our Environmental Problems"

Special Presentations and Reports

Students - Teachers -

Public Organizations

P.M.

12:30

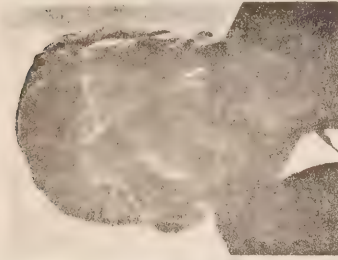
Luncheon

New College (Main Dining Room)

Chairman: Mr. Fred Speed

Speaker: Dr. Ralph Brinkhurst

"The Implications for Education
of the Environmental Crisis"



Dr. D. A. Chant, shown here, is no stranger to either education or the anti-pollution cause. Chairman of the Department of Zoology at the University of Toronto and adviser to many pollution control bodies in Canada and abroad, he will be the keynote speaker for "Education and Environmental Crisis" on June 5.

Following is a partial list of other resource personnel at the Toronto conference:

PROF. W. A. ANDREWS

College of Education - University of Toronto

PROF. WALTER TOVELL

College of Education - University of Toronto

PROF. GARY HEINKE *

University of Toronto

PROF. JOHN VAN LOON *

University of Toronto

PROF. JOHN BROWN *

University of Toronto

PROF. PHILIP JONES *

University of Toronto

PROF. DONALD MacKAY *

University of Toronto

PROF. H. A. REGIER

University of Toronto - Department of Zoology

PROF. JOHN DALES *

University of Toronto

PROF. W. O. BRINKHURST

University of Toronto - Department of Zoology

PROF. KIRK WIPPER

University of Toronto - School of Physical Education

PROF. NORMAN EMERSON

University of Toronto - Department of Anthropology

PROF. DOUGLAS PIMLOTT

University of Toronto - Department of Zoology

PROF. ROBERT GOODE *

College of Education - University of Toronto

LARRY GOSNEAU

Canadian Broadcasting Corporation

DR. JOHN SUTHERLAND

Department of Health - Province of Ontario

MR. ROGER REID-BICKNELL

Imco Corporation Ltd.

* Representing Environmental Sciences and

SPECIAL \$25.00 FEE REQUIRED

Students who register in this course must be prepared to pay a special fee of \$25.00 to cover the cost of field trips and an outdoor education weekend. Interesting and challenging activities such as orienteering, nature hikes, stream surveys, camping, skiing, and snow-shoeing are usually included.

FOR FURTHER INFORMATION :

For further information, please contact:

Professor J. H. Passmore,
Coordinator of Outdoor Education,
The College of Education,
University of Toronto,
370 Bloor St. West,
Toronto 181, Ontario

The College of Education University of Toronto



Outdoor Education

"Teach indoors those subjects that can be best taught in the class-room -- but do teach outdoors those activities that can be taught more effectively in an outdoor environment."

Outdoor Education is one of the new courses offered at the College of Education under Additional Related Courses.

It is an introductory course designed to assist the beginning teacher in making greater use of the outdoor environment as an educational medium.

While a background in such subjects as biology, geography, ecology, or physical education is desirable, -- no prerequisites are required. However, all students participating in this program should have a real interest in the out-of-doors.

THE OUTDOOR WORLD IS THE CLASS-ROOM

Outdoor Education is unique in two particular regards! First, it embraces all subject areas and secondly, it involves teaching outside the school. Under the direction of an imaginative and knowledgeable teacher, our fields, forests and streams -- our farms, gravel pits, and ski slopes become the class-room or laboratory.

While many early educational philosophers strongly recommended using the outdoor environment to make formal instruction more meaningful and challenging, it is only very recently that the important values of outdoor education have been rediscovered.



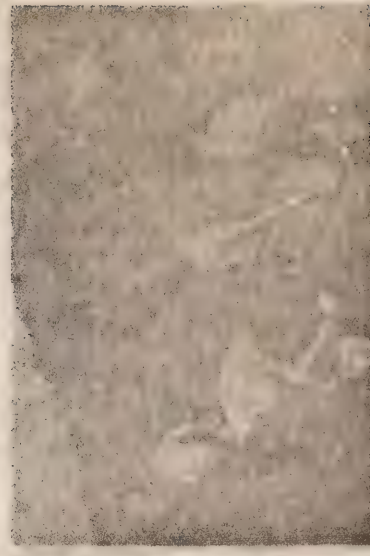
OUTDOOR EDUCATION IS INTER-DISCIPLINARY

During the last few years a great many progressive school boards have introduced outdoor education. In most secondary schools these programmes are cooperative undertakings between teachers of various subject areas. Much of the initiative has come from the science, geography, and physical education departments.

Frequently one teacher on the staff has been given a major responsibility for organizing the outdoor education programmes. They have usually been conducted on a daily or week-end basis; or students are occasionally taken to a field study centre or an outdoor education school for a weekly period.

Programmes offered vary considerably and usually are strongly influenced by the subject area of the organizing teacher. Much emphasis is normally placed on conservation and ecology; that is -- using the outdoor environment to demonstrate the human values inherent in the conservation of natural resources and the relationship of living organisms to their environment.

One of the major objectives of the course is to develop a better understanding of the many serious problems that threaten our total environment; -- the rapid deterioration and pollution of air, land and water.



THE COLLEGE OF
EDUCATION —
UNIVERSITY OF
TORONTO

in cooperation
with

THE METROPOLITAN
TORONTO AND REGION
CONSERVATION
AUTHORITY

"MAN AND HIS TOTAL ENVIRONMENT"

(Outdoor Education Course 455.15)

ALBION HILLS and CLAREMONT CONSERVATION FIELD CENTRES

Four weeks — July 6 to July 31, 1970.

General Information

COURSE PROGRAM:

To provide through lectures, seminars, discussions and field trip experiences:

1. Background information about out-of-school programs in Canada, U.S.A., Great Britain — and those presently conducted by educational authorities in Ontario.
2. An opportunity of developing a personal philosophy of outdoor education consistent with the new aims and objectives of education.
3. Information concerning the integration of subject areas such as Science, Geography, History, Physical Education, etc. in an interesting and challenging program of Outdoor Education.
4. Assistance in identifying indoor and outdoor facilities and resources already existing in the school, community and general area.
5. Knowledge about resource and services readily available to school authorities by voluntary and government agencies concerned with conservation, wildlife, archaeology, outdoor recreation, etc.

ACCOMMODATION:

Comfortable dormitory accommodation in beautiful Albion Hills and Claremont Conservation Field Centres.

REGISTRATION:

Limited to 40 qualified teachers.

COST:

Room and Meals	
(4 weeks — Monday through Friday)	
	\$200.00
University Tuition Fee	95.00
Total Cost	\$295.00

SPECIAL EMPHASIS
ON
ENVIRONMENTAL PROBLEMS
SUCH AS:
POLLUTION
OF
AIR, LAND AND WATER

PLEASE NOTE:

1. Special inexpensive weekend arrangements can be made for those wishing to stay at the Conservation Field Centres.
2. Lots of opportunity for swimming, fishing and other outdoor recreations.
3. Overnight camping and field trip experiences to be provided.

APPLICATION FORMS AVAILABLE FROM:

Professor J. H. Passmore,
The College of Education,
371 Bloor Street West,
Toronto 5, Ontario.



MECCA

MINNESOTA ENVIRONMENTAL CONTROL CITIZENS ASSOCIATION
CENTRAL MANOR • 26 East Exchange • Saint Paul, Minnesota 55101 • Phone: (612) 222-2998

February 28, 1971

Mr. R.T. Thomson, Secretary
Quetico Advisory Committee
Ontario Departments of Lands and Forests
Fort Frances, Ontario
Canada

Dear Members of the Committee:

Ontario's and Minnesota's canoe country has international uniqueness. The character of the Quetico-Superior wilderness area has a long and established history of joint management to retain the contiguous, primitive conditions for which these two harmonious geographic units were established. Policy decisions affecting this area should invite responsible contributions for consideration which are in the best public interest, and welfare, on matters concerning the management of the Quetico Provincial Park and the Superior National Forest.

It is because MECCA recognizes the interdependence of all components of our natural environment, including wilderness areas, we submit this brief to be entered into the official record of the Department of Lands and Forests Quetico Advisory Committee.

MECCA (Minnesota Environmental Control Citizen's Association) is an action and issue oriented citizens group with membership over 3,500. We believe man has reached the point where his environment- the only air, water, and soil he has- must not be further sacrificed to false notions of progress nor to short term economic goals. It is the duty of each person as well as those acting on behalf of the public's trust to preserve, protect, and insure wise use of our natural environment and the quality of life we all desire.

The task of determining goals and land and water uses for the publicly owned Quetico is not easy. There are the needs of the present as well as the future generations to consider and weigh. What has been the primary goal and purpose behind past decisions? What present problems and their solutions need foremost attention? What will be the long term results upon the park? What kind of provincial park will your children and your children's children inherit?

I say to you we have a wilderness in crisis- the pressures

are mounting. The impact upon the environment must be weighed carefully for the results may be irreversible. If we are to error, let it be on the side of preserving and restoring the natural resources of this great region and not from hastily drawn decisions in which errors are found, and take their toll, years from now. The use of DDT, the dumping of mercury, inadequate sewage treatment operations and the biotic effects of phosphates are all now creating air, water and land problems. If only we had known or investigated these problems when advocates so strongly assured us they were 'safe', non polluting, etc., etc.

The Quetico is regarded in L&F publications as "a wilderness park to be reserved from any development which might destroy the wilderness environment". What does this statement imply and how has it been interpreted?

To the canoeist who goes to the BWCA of the United States and usually visits the Hunter Island route of the Quetico, this area is free from the commercial intrusions of man. It is a place where man passes through but does not leave his mark in the form of buildings and other trappings of civilization. It is a place where man can live in harmony with nature by being a part of it. Thus the recreational values consistent with wilderness will not destroy... the canoe and paddle, the snowshoe, the backpack. This is why for every one Canadian visitor to the Hunter Island Route you will find twenty-seven Americans and also why 95% of the Park visitors are Americans.

Unlike their wiser border neighbors, the U.S. Forest Service has applied a form of management which allows conflicting use patterns. They have on one hand the most heavily used wilderness in the Wilderness Preservation System in the Boundary Waters Canoe Area (last year's visitors up 11%), and on the other hand have interpreted wilderness to include motorboats, commercial logging, snowmobiles and construction of logging roads. Many conservation groups are working now to change these conflicts and prohibit logging, and mechanized transport all together.

For now, the serious canoeist must paddle very hard and long to escape to a place of quietude free from the weekend warriors and those who feel primitive areas are to be conquered, exploited, and used for economic gain. The Quetico has the appeal because it

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has an area which is not open to logging or under heavy use pressure now in the Hunter Island district. The public's demand in Canada for more recreation lands will grow. Will Ontario be able to meet that need if a policy of maximum utilization of all resources or commercial logging destroys the very thing you are trying to preserve?

The problem is we are often forced into believing that primitive wilderness is for everybody. It is not. Instead of trying to accomodate all aspects of recreation and commercial exploitation within our fast diminishing wild lands, the Quetico included, why not develop and set aside in the public interest areas outside and apart from the canoe country which can be managed to allow regulated motorboating, snowmobiling and the like?

By zoning the Quetico Provincial Park a primitive area with no forms of timber cutting, mechanical transport, road access, mineral exploitation and other multiple-use conflicts, your future generations will indeed inherit a living example of historic and scenic beauty.

They will not be so privileged if the practices as exhibited by the Domtar under the Jim Mathieu timber cutting license are expanded to that great American volume agreement holder Boise Cascade. Although 70% of the park is not now being logged or under lease, you can bet the cry for more timber will bring pressure for cutting rights by the Ontario-Minnesota Pulp and Paper Company, a subsid. of Boise Cascade, to not commercially log but to do 'remedial' cutting. This gentlemen is nothing more than commercial exploitation disguised in the semantics of therapeutic or remedial logging. We have seen this kind of tactic used in the states before. I urge you to ask the Lands and Forests Department for a definition of this term and examples of where and under what sorts of regulations this cutting is carried out. Cutting involves roads and men and machinery and noise and surface disturbances not to mention wildlife habitat and population changes.

Mechanized transportation is another decision you will have to consider. A look to the BWCA provides a good example of how compatible these forms are with wilderness philosophy. We are having serious problems arising from increased types of motor driven vehicles. The Forest Service does have motorized routes which were established

from the standpoint of motorboats. That decision has resulted in the invasion far into the interior by modern day snowmobilies, something not expected nor anticipated during the time the decision was made. Now summer remote areas which escaped intrusion from the motor boat or canoe because of difficult access~~si~~ ibility, see winter bring easy travel, and difficult enforcem~~ent~~ I might add, deep into the BWCA. The State of Minnesota this winter in Department of Natural Resource hearings specifically bans the use of other forms of upcoming motors on state lands inside the BWCA but not on motorized routes as set forth by the U.S. Forest Service regulations . They have prohibited use of ATV's, minbikes, snowmobiles, as well as water propell~~ed~~craft onlands and waters partially within the BWCA and not on motorized routes.

The motors place in the wilderness environment of the Quetico is incompatibl~~e~~ for which the counrty was established. What water pollution will result? What will wildlife, winter as well as summer, do if subjected to these machines? Do we have research results or indications of long/short term results? Can the members of the committee afford to decide on such an issue without careful study as to the full impact?

Another problem which has been suggested is that of the spruce budworm. Aerial spraying is most often suggested as a means of control for this insect. The use of pesticides is usually thought to arrest the problem and return the natural ecosystem to harmoney. We now know this is not true. Spraying by air may be inexpensive and easy but the results are destructive and the effects carry over beyond the budworm itself. The evidence is clear on the DDT and other cloranated hydrocarbons. The worm is killed but the substance is inturn absorbed into the soils, washes into streams, and in turn again is carried to the sea. The build up in animals who feed on the affected grass or other animals exposed takes it toll. The birds are a good example of this process; large populations have been lost because of thin shells on newly laid eggs cracking and the offspring is lost. DDT has been traced to causing this. If spraying is done to control one problem there will be other consequences we shall have to contend with.. how will the natural enemy of the budworm react? What other forms of plant and animal life will be destroyed/ What are some other alternatives?

I urge the committee to have the L&F staff examine the Wisconsin Department of Conservation's study on budworm control through branch cutting. In a recent issue of their newsletter it was related that the budworm survives the winter by attaching itself to the lower branches which are buried in the snow thus insulating them from the death freezing cold. By merely cutting the lower branches off the trees and exposing them to cold temperatures showed success in controlling the disease. Pruning of all branches below the snowline in the summer time in an infested section would also greatly reduce the spread and survival rate of the spruce budworm. We need more research in this area to fully comprehend the best and most ecologically sound principles.

In summary then, there are many questions to be resolved in the management questions facing the Quetico. The role special interest groups are to play is critical when compared to the interests of the public at large. The logging interest which has enjoyed certain uses in the past will have to be re-evaluated in present day terms and other needs. The Quetico should not be divided up and managed different ways to meet multiple use patterns- it must be managed as a total unit if the wilderness character of the canoe is to be preserved. Alternative areas should be recommended for parks to meet new demands by the public for recreational places. The rules and regulations governing the protection and enhancement should be carefully studied and changed if necessary to insure the natural environment is neither destroyed nor impaired. Clear and enforced definitions of remedial logging, controlled cutting, and 'managed wilderness' must be made before management decisions are made .

In short, the conservation and preservation of the Superior-Quetico area has faced many threats in the past but each was countered when the public outcry was loud and clear. There were those who would have dammed the area for water power, dotted the area with commercial resorts, built extensive road systems and generally exploited for profit and personal gain. They were each in turn defeated through conservation minded and long range oriented individuals and groups. Let your actions speak for themselves to the generations not yet born. Good luck and God's speed.

Sincerely yours,



Judy Gavin, BWCA Task Force Chairwoman
of MECCA, Minnesota Environmental Control
Citizen's Association, St. Paul, Minnesota

REPORT PREPARED FOR THE ADMINISTRATION

OF QUETICO PROVINCIAL PARK

RECEIVED

MAR 4 1971

FORT FRANCES
DISTRICT OFFICE

Sebastian M. Oosenbrug, 407 Hazel St., Apt. 4, Waterloo.

In presenting this short brief to the Quetico Park Advisory Committee, I hope to stress what many concerned people consider important points toward the formation of future policies regarding wilderness areas in Ontario.

Quetico Park at present is a Class III "Natural Environment" Park, classed under the Parks Classification of 1967 as a multiple use area. This actually means that the Park serves several purposes: for recreation, wildlife preservation, and industrial activity, in this case commercial logging.

I hereby present the following arguments:

1. I believe the value of "natural" areas is lost when the sense of isolation is no longer present. Commercial logging activities in Quetico Park will destroy this condition of isolation.
2. Quetico Park is one of four large parks in Ontario which still retain some true semblance of wilderness. If this park is established for multiple use, there will be few areas of high-quality wilderness remaining.
3. The 468 square miles of park are of little economic importance to the total forest industry of Ontario. They are of extreme

importance to the total wilderness area in Ontario.

Therefore, I along with a vast number of vitally-interested citizens of Ontario wish to maintain Quetico Park, along with Algonquin and Lake Superior Provincial Parks as Class 1 "Primitive" Parks, safe from the destructive forces of commercial logging, mining, or other economical activity that would threaten the remainder of our wilderness heritage.

Quetico Provincial Park-A Time for Re-assessment ?

"The capacity to use leisure rightly is the basis of man's life."

Aristotle

In this era of material affluence, urban strife and environmental awareness, this quotation is becoming more significant. Previously the struggle for life took most of man's time and effort, and leisure was the right of the rich or the curse of the poor. Recent advances in technology, the shortened work week, the universality of paid vacations and the change in attitude towards rural vacations have increased the demand for recreational facilities. Recreation has moved from a daily outing barely beyond the confines of the city to a planned, family excursion of several days. This change has seen a growth of cottage country, rural towns, and a general warm-weather urban exodus.

Along with this came an intellectual metamorphosis towards wilderness. Because man is a visually oriented person, he was not at home in the wilderness, and was forced to use senses (auditory, olfactory, smell) that were unnecessary in the open. He could not cope with the wilderness, he felt menaced and alone here. Wilderness threatened his survival.

Because man was given dominion over the earth, his attitude towards it was selfish and exploitive. Biblical literature refers to wilderness as the dominion of wild beasts, a cursed land made desolate by God's will, a refuge for evil spirits. Its purpose was to serve man, and supplies of and, both wilderness and otherwise, seemed infinite. Little thought was given to preservation or regeneration; man did not condescend to helping nature: conservation was costly and served no commercial purpose.

This pattern followed into Europe, and the westward migration brought this attitude to the untapped resources of North America. The plains were opened up, but man felt at ease here because he could see and sense approaching danger. Here he had no fear of travel or solitude.

But, the plains were not the great wilderness areas, and did not offer the same challenge as did the spiritual triumph of closing the wilderness frontiers. The domestication of wilderness was the cultural nationalism that prompted the consolidation and expansion of civilization, and the urbanization of wilderness. Wilderness was surrounded and under control, and gradually civilization was causing the disintegration of the last great areas of wilderness, ^{and} the call for preservation was heard.

Yet, there always exists an appreciation of certain values by small groups of individuals before the masses come to the same conclusion. Such was the case with wilderness, as writers and artists saw the romanticism and primitivism of the wild; to them it was a place of solitude and repose from the world, a place of the basic essentials, where man had to confront his whole existence in terms of his basic abilities. They began to associate the forests with God-the excitement and appeal of uncivilized, unspoiled nature where the divine purity and power could be seen as a symbol of the complexity and omnipotence of God.

The growth of the city, the rural-urban transition and the modernization of rural life meant the disappearance of wilderness as a facet of life. Growth of urbanism created a need for a counter culture, perhaps as a reactionary trend to city life. Because the wilderness was antithetical to everything in the city, and did not threaten man's existence, the growth of wilderness appreciation was complementary to urbanization. It was a place to relieve the pressures of urban life, a place to visit when not working.

As the masses sought out wilderness, one eye was open to the aesthetics of nature, while the other was open to the commercial possibilities possible. The powerful financial resources and political influence of industry won out, "in the interests of economic expansion," and the prime wilderness lands close to civilization were used for industry. The individual was forced to accept what was left, wherever it was, or to salvage whatever was left, through legislation or private purchase. But, what was left was remnants of wilderness, far from civilization, and pitifully small.

Only within the last century was any attempt made to set aside large areas of wilderness for public use; yet even this has met with opposition. Some interests oppose wilderness for economic reasons, some for personal reasons, but the greatest numbers are simply apathetic towards it.

There is no great wilderness movement in Canada because the land is so sparsely settled; over ninety percent of the people live within one hundred miles of the 49th parallel; most land lies to the north, away from the pressures of human civilization.

But, wilderness is not of uniform quality or accessibility, and the subtle gradations create the uniqueness that suggests optimal use. The land in northern extremities has little recreational pressure; its commercial applications affect few recreational pursuits. Within southern Ontario, however, the use of land for commercial purposes precludes recreational uses; but this is the land most useful and convenient for recreation. Wilderness recreation, perforce, suffers from lack of land, and population pressures; and quality of land for wilderness pursuits, because of its uniqueness, is not always located where convenient. Any land in the densely populated areas then should be re-examined as to its wilderness capacities: is there any other land in the vicinity that could be used for alternative uses ?

In a ^{country} ~~land~~ of abundant crown land, people should have a free choice of recreation facilities within a close (reasonable) proximity of their dwelling. However, because each setting is unique, a full complement of activities cannot be available at each location, because some are mutually exclusive (ie. fishing and waterskiing). Hence, each location should make the best use of its unique characteristics.

Unless a setting can accommodate a full variety of competing uses without infringing or inconveniencing upon other uses, some **decisions** must be made because not all interest groups can be fully satisfied simultaneously.

the same reasoning, each area has its own sentiments and capacity to maintain it, and extensive overuse can destroy the fragile ecological sensitivity. Merely because a site is large, it does not have limitless capacity to absorb infinite numbers of canoeists, skiers, cottages, litter, excrement, noise-or people! Once the carrying capacity is passed, the long term results can be disastrous. Since we do not know the capacities, how do we know if we have passed them? Study is definitely needed in this area, perhaps before it is too late.

Since there is much we do not know about site capacity, we have an obligation to ourselves-and our descendants-to find these levels before we have passed them forever. We should also determine optimal visual perceptions of wilderness areas; perhaps wilderness appreciation can be improved with the aid of forestry management. Hopefully the Lusty and Rimmington studies will answer these questions, perhaps the Parks Management Branch has already accomplished this.

With respect to policy planning, one must seek out literature accurately looking at the future uses and needs of this region. Often in considering recreational demands, projections are done on current uses and numbers. These forecasts do not allow for sudden popularization of activities (skiing in the early sixties) or the appearance of new recreational forms (ie. snowmobiles). Hard to measure, also are the effects of the quality of the environment and its change with the activity as well as the change in terms of new activities. Coupled with the forecasting difficulties is the effect that increased numbers will have on the environment. The rural-urban drift has affected the need for convenient nearby rural recreation, and the increasing population (and industrial growth) is likely to put more strain on convenient recreation. Similarly, recreational growth should be planned concurrently with regional economic expansion policy, to connect supply and demand. Recreational policy, therefore, is a complex plan that must be carried on according to some guidelines, and based on finite

statistical information. These questions should be implicit in the background philosophy of policy; without the answers a hit-and-miss philosophy may develop based on evolutionary parks practice and the maintenance of the status quo, on the premise that it is correct.

The Dichotomy of the Multiple Use Policy

"Although much of the Quetico has been exposed to early logging and fire, it is still a precious asset, preserved in a wild state, for those who wish to enjoy it by means of paddle and portage"...It is preserved "primarily as a wilderness park for wilderness recreation and is protected against any disturbance which might cause deterioration and destruction of the wilderness environment." ~~1964~~

Recent years have seen the introduction of portages, change houses on the beach, government-owned motor-boat launching ramps, seaplane landing ports, a museum, outdoor amphitheatre, food and refreshment concessions, a carpark, daily garbage collection from campsites and summer insect spraying. It would appear that the park is neither in a wilderness state, as advertised, nor fully oriented towards multiple use, as it exists now.

Similarly, because timber is seen as a renewable natural resource not incompatible with recreation, forest management systematically exploits this park. However, logging roads are cut into camping areas, road beds are created and levelled, and logging companies have been known to violate government rules. The financial problems of Jim Mathieu Co. attest to the fact that profits are not adequate, perhaps because the sawmill is not running at full capacity. It is likely that, given the opportunity, they would cut more than is being done; needless to say various prospectors and mining associations are displeased with present policy, and would like the opportunity of multiple use within the park also.

It would appear that neither party is satisfied with present policy implementation; both would like additional use of the facilities.

1. Taken from Quetico Provincial Park, (page 2), a Lands and Forests brochure printed when W.J. Spooner was minister

... comparing the two uses, it is often convenient to use economic returns as a basis for calculating planned usage. Dark recreation, however, cannot be measured in dollars and cents, except if one can calculate returns to industry through the sale of recreational equipment. Recreation is, on the whole, a subjective activity which means that there are virtually as many values and expectations as there are people. One can make no attempt to define the values of the users in relation to the spaces (ie. one may hike to see the trees, another for exercise, another to be alone, another to birdwatch etc.), and these values, related to the activity, may or may not require the same environment.

Recreation cannot be considered in the same terms as economic interests, or with anything near the accuracy. But, this does not mean that recreation has values that cannot be calculated. The conflict situation between logging and recreation indicates the necessity for a value judgement in terms of the economic rewards of industry versus the far less tangible returns of recreation. The various aspects of making such a comparison and the implications must be examined very closely.

Conclusions

The public recognizes a collective responsibility for the management and preservation of our environment and its values. This has been delegated in part to the government, whose mandate is to follow the voice of the citizens, tempered by professional education of probable implications. Government action should be based on some policy, arrived at through knowledge of the parameters in question, and taking an overview to relevant variables.

The power of man to irreversibly alter the landscape is now so great, and change so rapid that few opportunities to preserve large areas of natural beauty will be available in the future. Reservation and preservation should be initiated before the costs become prohibitive.

The objective is the best possible living standard for every citizen. In relation to this objective there is a growing realization that nature sanctuaries (wilderness areas) are essential to provide a change from the pace and demands of modern civilization. Provision for adequate and suitable land deserves investigation in any public recreation policy.

Recommendations

The examination of wilderness identification and reservation must be done in general terms, and should be related to specific items such as site sensitivity, capacity studies, perceptual objectives and demographic projections concerning population, recreational habits etc. This would have the effect of defining what is needed, what is available, and what should be done. Hopefully the land capability studies now being done by Lands and Forests should play an important part in this process.

The parks classification (and zoning) system is a good system, however the committee on nature reserves has not recommended or set aside many primitive areas, and those have had their boundaries altered too easily to accommodate commercial interests. Wilderness parks, or areas within existing parks should be large enough to accommodate ecological systems.

Zoning existing parks is a good idea, except that some provision should be made to separate existing mutually exclusive uses, or segregating uses (ie. fishing) within zones to ensure maximum satisfaction.

Existing uses of the parks could be increased to include non consumptive uses such as museums, scientific research, wilderness tours (perhaps arranged through the Department of Tourism to bring in foreigners), additional wilderness outfitters and an official policy to prefer canoe trips and wilderness recreation, if so desired. Additional revenues could be realized by taxing out-of-country visitors more heavily than at present. The alternatives are endless, constrained only by government policy.

om all available statistics, it would appear that provincial parks are becoming more popular each year, to Canadians as well as visiting Americans. The fact that 95% of all visitors to Quetico are Americans might suggest that nothing similar exists in USA. Through material progress and population growth their parklands have systematically disappeared; our park statistics concerning American visitors attest to this. At present we have the capacity and generosity to allow them entry without depriving any Canadian of his priveleges.

Will we always have the capacity to provide wilderness recreation? What is the capacity of Quetico now, during, and after the projected forestry management program, to provide the "wilderness experience?" Is there existing crown land being set aside for primitive parks, and how much should be set aside? These are questions that must be answered before any **decisions** are made.

A SUBMISSION By AMEL CACIL
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THE QUETICO PARK CONTROVERSY

Stephen Kendall

March 3, 1971

THE PRESERVATION OF QUETICO PARK

Preservation of the Landscape:

Preservation is a word with a simple meaning that has been burdened, especially in this course, with a number of "interpretations". Preservation means to maintain in a present state, to retain the quality or condition of, to keep safe from injury or destruction.

Land scape is an all-inclusive geographic unit which is a combination of the eco-system and any unnatural intrusions present in an area.

Quetico is one of a few remaining areas in which these unnatural intrusions are at a relative minimum. Trails, portages and campsites are the major manifestations of human culture in the area. Quetico is a cultural landscape, albeit a primitive one. Thus, to preserve Quetico Park means to maintain the quality of this landscape in its present condition of minimal intrusion and to keep this landscape safe from injury and destruction.

The Physical Resource:

The Park consists of a succession of knolls, ridges and narrow valleys with many interconnected oligotrophic lakes. The macrorelief is classed as weakly broken plain to strongly broken uplands.

The soils are sandy, bouldery tills (glacial drift) with intermixed peat bogs, eskers, small patches of lacustrine sands and clays (from glacial Lake Agassiz), and areas of essentially bare bed rock.

The boreal forest which survives on this meager substrate consists mainly of jackpine, a species of value as pulpwood. In areas long undisturbed by fire or logging there are stands of red pine or white spruce and balsam fir, all valuable timber species, and aspen.

Multiple Use:

Logging and recreation in the Quetico Park are completely incompatible. Lumbering is a consumptive use and as such consumes some of the resources required for a good recreational landscape. Not only the trees, but the variety of the landscape and the absence of mechanised man are destroyed. The Multiple use concept is non-functional unless one use is fully subordinated to the other, and due to the nature of the landscape in this case, subordination means complete restriction on one of these uses. Multiple use without conflict is possible only under the condition of social consensus establishing the priority for each use. In the case of Quetico Park I feel that this priority should be given to preservation rather than to exploitation.

The Myth of Forest Management:

There is a popular misconception that land managed for continuous tree production automatically provides desirable wildlife habitat, protection of the watershed, and recreational opportunities. But the managed forest landscape differs greatly from the more natural landscape preferred by the wilderness recreationists. Production-oriented management creates uniform, often mono-species stands which are dull, monotonous, provide little food or shelter for all but a few species of wildlife, and generally detract from the diversity of the landscape. Roads, bridges, fire breaks, and other management devices are often objectionable to the hiker or canoeist but not to the forester because they have different points of view. The recreationist has a closer contact with the land and is more sensitive to subtleties of the landscape.

Foresters think that a "healthy" forest can only be maintained by logging. But what they mean by healthy is productive. The more mature and diverse forest preferred

by reationists is just as healthy as the managed forest, and probably just as productive, but not all of the production from the eco-system is channeled into commercially valuable species.

Management in Quetico:

This discussion of forest management applies to only a small portion of Quetico Park because of the limitations of the soil resource. In a seven class system for rating the capability of soils for timber productivity, in which 1 is the best and 7 is the worst, most of the land in the park falls into classes 5, 6, and 7. (see map of timber use capability, Ontario Land Inventory)

The present stands of jack pine are the result of a long growth period. The more valuable species such as red pine, white spruce and balsam fir are the result of a much longer undisturbed succession of biotic communities. Regeneration of the forest on this infertile and unstable land is so slow that logging constitutes the out-right exploitation of a doubtfully renewable resource.

Perhaps the preservationist should be as much concerned with thwarting the "frontier" mentality of the exploitative forest industry and encouraging its relocation in an area capable of supporting a long-lasting, stable system of production thus cutting off the threat to wilderness areas at the root.

Quetico as a Primitive Park:

It is the opinion of this group that Quetico should be classed as a primitive park (Classification of Provincial Parks in Ontario, 1967) as a representation of a natural landscape, for the enrichment of outdoor experience and knowledge and for the fulfillment of society's psychological needs. This does not mean that people should be excluded from the park. Man was and is a part of the park's landscape. However, if it is to remain a primitive landscape, human use must be restricted to primitive activities and primitive intensity. It is man the technologist and man the overwhelming population, not man the organism that disrupts the primitive landscape.

Soci Decision:

In order to resolve the Quetico controversy it is necessary for a consensus, founded in social values, to be reached on the priorities of land use. At present there is no consensus but this seminar is attempting to move towards one. and in this vein I want to point out the special nature of this decision. A decision to preserve wilderness can always be reversed at a later date if society reaches the consensus that the value of wilderness is definitely less than that of alternative uses of an area, but the decision to destroy wilderness now is irreversible no matter what conclusion society may reach in the future.

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Brief to
QUETICO PARK ADVISORY COMMITTEE

by the students of
Merivale High School
Ottawa 12, Ontario

The following are carefully thought out and researched observations and conclusions on the actions of individuals and the Ontario government regarding the preservation of Quetico Provincial Park.

It is hoped that these impressions will reflect the deep concern carried by the youth of Ontario for the perpetuation of a truly unmarred wilderness.

If the Ontario Government continues to allow logging in Quetico Provincial Park, they are going back on a promise they made to the citizens of the province. In 1909 the park was set aside as a forest reserve, to be kept, as far as possible, in a state of nature. In "Quetico Provincial Park" published by the Ontario Department of Lands and Forests, it is stated "It is regarded primarily as a wilderness park for wilderness recreation and is protected against any disturbance which might cause the deterioration and destruction of the wilderness environment". By allowing logging they are not protecting the forest as a wilderness park, for wild defined in "The Pocket Oxford Dictionary" is "in the original natural state and not civilized or domesticated or cultivated or populated".

Logging by man is certainly not a natural occurrence and if it is allowed the reason for the park is no longer valid.

The Ottawa Valley used to be covered in giant White Pine but because Philomen Wright, lacked the foresight, in his greed, to leave even one acre of Virgin White Pine for his grandchildren to see, the great giants are no more. The great pine forests survived for countless years without man's aid and were destroyed only when man stepped in. Now the 1971 Philomen Wrights (the logging companies) are trying to sell to the authorities the idea "that man is needed to maintain park forests". Is it not

time the authorities took a good look at "Philomen's Folly" and not only maintain any existing, untampered, parkland in its natural state but re-instate all parks so that they will be virgin forests again? We should be able to see areas in Canada untouched by man. It is our duty to see that our children see areas unchanged by man. If our government fails to live up to its promises, who can we count on to do the job?

Quetico Park is open to recreation. People who go on canoe trips and hikes do not want to have to pass logging operations. People go to the parks to get away from "civilization" not as they can encounter another form of it (logging operations).

If logging is allowed, the loggers will want to tamper with nature to get a better harvest. Tampering with nature plays havoc with the ecological system in any area of the country. In a provincial park, nature should be allowed to run her own affairs unaided by man. An example of havoc caused by man took place in New Brunswick when they sprayed for the Spruce Budworm (which must be controlled to insure a good forest crop). Studies done in 1966 showed the damage this one project did to only one aspect of the ecological system.

$\frac{1}{2}$ pound of DDT was dissolved in $\frac{1}{2}$ U.S. gallon of oil and sprayed from a plane over one acre. Some of the solution fell in lakes

and streams and affected areas far from where the spraying took place. Over $\frac{1}{2}$ of the aquatic insects were killed, as they were in a pupal or other inactive stage when the spraying took place. Survivors were smaller than usual. In fact it took four years before the aquatic insects recovered. These insects were the food of the salmon. In the salmon the immediate mortality rate was 95% loss of underyearlings, 70% loss of parr between 6 and 10 cm. long and 50% loss of parr larger than 10 cm. long but in their premigratory year. With the onset of cold weather, many more died. The survivors were less adaptable to the environment because of changed temperature responses. Behaviour and physiological functions of many changed. Other areas of the environment were also affected. Studies showed increases in midges and mayflies the following year and reduced numbers of fish such as the brook trout. The eel was found to be very sensitive to DDT. The merganser, which preys on the fish, was reduced in numbers. Many more areas were probably affected also since the ecological system is so interwoven but other areas were not researched.

Man using canoes and his own feet to travel, damage nature enough with his careless use of fire (man causes about 80% of all forest fires) and his trail of garbage. If man has to work to get into the wilderness, those who enjoy and respect nature are going to be more likely to go. If motorboats and snowmobiles are allowed,

people who would be just as happy tearing around an already polluted lake or over an open field would have access too.

Motorboats are motors and cause pollution just as the motor in a car does. Man has a greater advantage over nature with them--speed. He can now chase a mother duck and her baby ducklings who can not yet fly. The noise of the motorboats cut the air and scare away even more of the animals. The Department of Lands and Forests states in "Quetico Provincial Park" that the park is "for the protection of the fish, birds, game and fur-bearing animals therein" as well as for the enjoyment of man.

The winter is a tough time for animals. Only the hardiest can survive the cold and lack of food. When snowmobiles are allowed, the animals use up precious food supplies running from the snowmobiles. The snowmobiles have so much speed they can chase the animals until they drop from exhaustion. On Lake Simcoe last winter snowmobilsts chased a wolf to death and then collected on the bounty. Does may lose the fawns they are carrying if chased by snowmobiles. Even if rules are passed prohibiting chasing animals, the snowmobiles are so fast the law would be hard to enforce.

Snowmobiles pack the snow and allow frost to penetrate deeper. In the spring the paths are the last to melt. The tops of baby seedlings are often knocked off by snowmobiles. This means

vegetation in the forest is harmed and if it continues yearly could do permanent damage to the forest.

Animals who burrow under the snow have their trails blocked by the snow packed by snowmobiles. The great maneuverability of snowmobiles gives hunters a great advantage. The moose hunting season is held when there could be snow on the ground. More moose could be killed than usual and an already rare animal could come close to being extinct. If this happened, it would affect the ecological systems in the parks as well as the rest of the land since nature is so interwoven. More people ice fish when they have snowmobiles and in some areas the lakes are becoming exploited. Some areas should be free from ice fishing and a provincial park would be only doing its duty and fulfilling its promise to the people if it were set aside.

If there were only a few snowmobiles and motor boats the problem would not be too great. But there were over 100,000 registered snowmobiles in Ontario in 1969 - an annual increase of over 30,000 snowmobiles and 20,000 motor boats in Ontario alone!

The problems of keeping Quetico Provincial Park as the promised wilderness are becoming more difficult as man develops a more technological society. We have a duty to our children to pass on a small portion of the original Canada. We must give up some profits from logging Quetico Provincial Park and give up the pleasures of motor boating and snowmobiling in it so we can pass our precious heritage to our children.

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Motorboating in the lakes of the park would be disastrous to the ecological systems. My peers and I believe there are many reasons for the first statement.

First of all, only eighty percent of the oil and gas entering a boat's engine are completely burned away. Therefore, twenty percent is discharged into the air and water.

Air pollution is a growing problem nowadays; I believe that the fumes discharged by a boat engine would harm the wild life in the area.

Water pollution and noise pollution would result too from the operation of motorboats. Gas and oil would be pumped into the lake due to the motors. This would harm the fish and any plant life in the lake. Noise pollution would also harm the area's animal life. Many animals that dwell in the park are sensitive to loud noises. Motorboat engines which are loud, could quite conceivably drive some animals away.

The whine of the engine has a hypnotizing effect on the fish. This and the effect of the lure would almost guarantee a sure catch to any 'trollers'. This could definitely deplete the lakes fish supply in time.

The engines of motor boats are water-cooled. This means lake water is circulated through the boat's engine and picks up engine residue and puts it back in the lake. This helps lead to water pollution.

Motorboats, when they come in close to shore, stir up the water and destroy and uproot much of the plantlife close to shore. They also scare away small animals such as frogs and schools of minnows. If these are gone, then much of the food for larger fish disappears and finally the large fish disappear. If boats are allowed in the lakes, then docks would have to be built and this is a great eyesore, when you see hundreds of boats 'clumped' around a dock.

In conclusion, I hope the Ontario government will take this seriously and not lightly as they have with all other forms of pollution and try to keep at least one park untouched by man's hands.

There is no trapping of any kind allowed in national or provincial parks. There is no harming or killing of any animals allowed except when animals are killed for their own good (e.g. have been injured in a poacher's snare and no chance of survival). The subject of poaching has long been a sore point and naturally there has been a good deal of it. The park borders on inhabited areas and the natives of these areas have regarded the lands put away for conservation as being no different from any other area. They argue that trapping in park areas is part of their heritage and survival and that the ecological system of the park would be disturbed if the trappers did not trap a certain amount of wildlife.

I strongly believe that the natural predators of such animals, and not man, should be allowed to determine the ecological balance of the park. When traplines are set out, it necessitates a 2 or 3 day operation - the same is true of collecting animals caught in the traps. Man is a careless creature, experienced trappers unexcepted, and there would be some damage done to the area in maintaining these traplines. The argument brought up by would-be trappers concerning the idea of trapping being necessary to their survival is no longer true in this age of supply and demand.

I submit that the punishments for trapping increase in severity and the vigilance of park wardens against poaching be reinforced. If this provincial park is to remain as an area of incredible wonder then the Ontario government is going to have to hold man back from ultimately destroying himself.

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BRIEF TO QUETICO ADVISORY COMMITTEE

We appreciate the opportunity to present our views on Quetico Provincial Park to the Quetico Advisory Committee. We are both Graduate students in Geology and have worked in all parts of Canada for government surveys and mineral exploration companies. Every summer we spend considerable time in remote wilderness areas. This is one of the rewards of our profession, since we return to urban living in the fall refreshed and revitalized. We feel strongly that the restorative power of unspoiled wilderness is essential to physical and psychological well-being and that it is the responsibility of governments, provincial and federal, to set aside and preserve natural sanctuaries which are easily accessible to urban dwellers. In areas accessible to large centers of population, the need for parklands is greatest, but here the pressure from exploiters and consumers of natural resources is also strongest. The government must balance these conflicting interests of urban populations by promoting resource management rather than zealously pursuing economic growth. The following changes in outlook are important: 1) overcome the pioneer tradition that wilderness is hostile and must be conquered; 2) realize that the concept of multiple use is outmoded since modern commercial logging and wilderness preservation are incompatible; 3) recognize that natural processes such as fire keep the ecosystem in balance by clearing way for new growth and browsing; 4) value the quality of life at least as highly as board feet of lumber and 5) show some concern for the kind of environment our children will inherit.

The Ontario government itself publicizes Quetico as "one of the last great primitive areas on the continent" and "the largest accessible wilderness canoe area in North America". This in part describes a Primitive Park and we feel the government is inconsistent in its policy by not classifying Quetico as such.

In addition to the aesthetic, historic, scientific and recreational values of this magnificent canoe country, it would then be the only Primitive Park in Ontario accessible by road and rail from large urban centres in Ontario, Manitoba and the U.S. Together with the contiguous Boundary Waters Canoe Area in Minnesota, Quetico is a unique resource, a reservoir of unviolated wilderness that we must not allow to be destroyed.

Commercial exploitation is not compatible with this wilderness. Modern mechanized logging causes major environmental disturbance. The haulage roads in Quetico are major thoroughways and aside from their ugliness when viewed from under a bridge or across a dusty portage, when logging is completed, there would be irresistible pressure to carry the road a dozen miles through to the U.S. border to meet the highway coming from Minnesota and open the route to tourist traffic. The interior lakes of Quetico, now accessible only by canoe would be open to the foul smell and noise of motor boats and snowmobiles and the intensive use which soon destroys the wilderness quality of a region. There are countless lakes in Northwestern Ontario accessible to motorboats, but there is no area, other than Quetico, with an isolated network of lakes available for those who wish to travel silently.

The authors of the Provincial Park classification recognized "the psychological need, of many people, to know that unspoiled wilderness areas exist". In addition, it is our right to expect proper management of such areas so that their unique wilderness qualities are maintained for our continued use and enjoyment, for this is part of our Canadian cultural heritage. However, preservation of wilderness and environmental quality is not free. It will cost money and effort to provide alternate jobs for the sawmill workers at Sapawe, but the social costs of commercial invasion into Quetico may be immeasurable. We are personally willing to pay more for lumber, to pay much more for use of an unspoiled Quetico, to lower our standard of living in order to slow environmental deterioration and the erosion of collective and individual choice. The value of variety, of great beauty is an ethical question and as such is largely subjective. We hope you will consider the value of Quetico to us in arriving at your decision.

Widespread public interest has focused on the Quetico issue, and its outcome will reveal the Ontario government's sincerity regarding park and environmental quality policies. We petition the Ontario government to take responsible steps to insure the preservation of Quetico as undisturbed wilderness.

We request:

1. Reclassification of Quetico Provincial Park as a Primitive Park as defined in the "Classification of Provincial Parks in Ontario, 1967".

2. Immediate declaration of a moratorium on logging and road building on the Domtar-Mathieu Timber licence in Quetico Park to prevent further deterioration of the wilderness environment, especially at a time when public hearings on the issue are in progress.

Dated at: Toronto, Ontario

March 1, 1971

Submitted by: Dianne & Ulrich Kretschmar
50 Stephanie St., Apt. 1402
Toronto 133, Ont.
366-5565

Ulrich Kretschmar

49 Heddington Ave.,
 Toronto 12, Ontario.
 February 23, 1971.

The Hon. Fene Brunelle,
 Minister, Ontario Department of Lands and Forests,
 Ontario Provincial Buildings,
 Toronto, Ont.

Dear Sir:

This letter is written to present recommendations of myself and of many of my friends with regard to the preservation of our present wildlife areas in our Provincial Parks, and of the establishment of others; and, at the present moment, to ask for prompt action to save Quetico.

As average citizens, we accept the scientific value of primitive wildlife areas as beyond question - what we see are the fresh air and water, the great natural beauty, freedom from noise, the chance to stretch muscles away from mechanical transportation - generally a place to get away from the stress of urban living and recharge batteries. This is not an idealistic picture - it is plain dollar-and-cents practicality. Health is our No. 1 asset - money spent to protect it will return dividends in many ways. We believe that the maintenance of our primitive wildlife areas in our parklands is one of the cheapest ways in which our government can protect health and serve the physical, mental and cultural needs of our people.

We understand that the reforestation of areas in our Provincial Parks cut over by lumber companies is done at the expense of the Department of Lands and Forests. If that is correct, I, as a taxpayer, vigorously object thus to subsidize the lumber companies, for revenue from stumpage, etc., must be less than the costs of reforestation. Elimination of lumbering from the parks would have a minimal effect on employment because the companies have already dismissed so many bushworkers through mechanization of equipment. It is our belief that lumbering should be confined to areas outside of parklands. We must protect this great natural asset - once destroyed, its loss is irretrievable.

REC
 To the Quetico Advisory Committee and the Department of Lands and Forests, I, as a concerned citizen, make the following recommendations:-

I. That our present wilderness areas - our Provincial parks - be maintained free of commercial use.

II. That more large areas in our Province be set aside as wilderness areas to take care of our future needs.

III. That in our parks, mechanical means of transportation be discouraged or prohibited, and a solid effort be made to control garbage, and educate campers to keep camp sites clean.

IV. That more camp sites be provided, not necessarily in parks, such as the one on Highway #11, at Temagami. The Department may be proud of the many excellent ones already in service.

V. That crown lands be sold only to Canadian citizens.

VI. That all logging companies be compelled to re-forest areas that they have cut.

A copy of this letter will be sent to our Member, Mr. Leonard Reilly. We hope that the influence of both of you will be exerted to preserve the great natural resource of our wildlife areas.

Yours very truly,

R. R. Reilly

RC/s



Canadian Lumbermen's Association / l'Association Canadienne de l'Industrie du Bois

27 Goulburn Avenue, Ottawa 2, Ontario
Tel. (613) 233-6205,

File No. 50-2-94

March 1, 1971.

Mr. H. G. Hancock, Chairman,
Quetico Park Advisory Committee,
Ontario Department of Lands and Forests,
Fort Frances, Ontario.

Attention: Mr. R. T. Thomson,
Secretary.

Dear Mr. Thomson:

In connection with the eventual plan to be developed for Quetico Park I wish to inform you that the Canadian Lumbermen's Association supports completely and in its entirety the brief as submitted to your committee by the Ontario Forest Industries Association.✕

Thank you very much for the opportunity to comment.

Yours very truly,

D. D. Lockhart, R.P.F.,
General Manager.

* See Print No. 113

DDL:mb

BRIEF SUBMITTED TO QUETICO PARK ADVISORY COMMITTEE

My purpose in writing this brief is not to bring out benefits based on economic gain, nor is it to swamp the Committee members with a deluge of facts. It is, however, my intention to try to set this controversy of Logging vs Wilderness Preservation in its proper perspective. "The Parks are dedicated to the people of Ontario" states the Provincial Parks Act R.S.O. 1960, which is the same thing as saying "parks are for people". This does not mean that they are there for commercial exploitation. If you look carefully at the situation, this is just what has, and is happening, and will continue to happen unless a definite and positive stand is taken on logging in Quetico.

I would like to put forth my wishes in regards to Quetico Provincial Park. First I urge you to recommend to the Minister, Mr. Brunelle, who holds the fate of Quetico in his hands, to issue a cease and desist order on all logging operations and that further steps be taken to either (1) reclassify the Park as a Primitive Park under the 1967 Provincial Parks Classification System, or (2) turn the Park and all the resources contained therein to the Federal Government--for designation as a National Park, the fourth such in Ontario of which the present three occupy a grand total of 12½ square miles.

Why don't I think there should be logging in the Park? There are many reasons. First I should like to leave the logging aspects to the experts, they can best describe the senseless damage done to an environment. However, I might quote a report from the Ontario Economic Council entitled "A Forest Policy for Ontario" dated February 1970. In this report it was stated the following facts, "Many companies have failed over the years to carry out adequate reforestation and regeneration programs and in particular, research into, and development of improved tree strain, fertilization, and harvesting productivity." If this is the case, how can we expect the logging industry to have any respect for the natural scenic and aesthetic values in a Provincial Park when they have no personal value in the Park except what they can extract for profit. The logging industry does not have to replant an area once the trees are cut--their business is finished.

My second reason for banning logging in the Park is that this is a unique and indigenous area of Northern Ontario. It has a wealth of Historical, Archeological, Botanical, Geological, Geographical and Zoological examples. To name but a few: it was the main route for the fur traders, "the Voyageurs" Cour des Bois, men such as Simon Fraser, David Thompson, La Verendrye and Peter Pond passed through this area in the quest to discover the west.

The Park boasts of one of the heaviest concentrations of Indian rock painting in North America and provides excellent examples of "wild rice" stands, once harvested by the Ojibwa Indians. Quetico stands on the Canadian Shield, some of the oldest rocks in the world can be viewed here. In addition, Quetico serves as a sanctuary for the Bald Eagle and Timber Wolf. Also, it is considered by many, including the Department of Lands and Forests, as one of the best accessible areas in North America,

if not the world, for Wilderness Canoeing. Quetico Provincial Park is a storehouse of culture and yet it is not treated so by the Ontario Government if one can believe press releases. It appears to be, rather, treated as a timber management area, much the same as areas outside the Park.

Why do we need wilderness? Can you or should you try and justify setting aside areas for preservation, on an economic basis? This is a vital question to be answered. If the answer is yes we should have an economic justification for wilderness preservation, then I say we have finally reached a point where monetary value supercedes all the philosophical, moral and spiritual values we have accepted and molded our lives with.

We need a degree of wildness everywhere, because it softens and diversifies a landscape which is man-dominated. David Henry Thoreau said it well over 100 years ago. "In Wildness is the Preservation of the World". These few words express Thoreau's main philosophy of life and tell us what he discovered so long ago, and that is that a leaven of wildness is necessary for the health of the human spirit, a truth we seem to have forgotten in our hell bent for leather rush to conquer and control all nature.

It is my hope that man will be able to place technological developments in their proper perspective and not destroy the quality of life he so dearly seeks. This feeling is brought out in the "bid" to save Quetico. It will be an example for all to see that we do need wildness and that we do recognize the need of it.

I can only ask that a fair and just decision is made regarding the Quetico Park and that all the evidence presented is carefully weighed before that decision is made.

I respectfully submit this report for your perusal.

Douglas W. Everett

Douglas W. Everett,
University of Guelph,
Ontario Agricultural College,
Resources Management Major.

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BRIEF

Quetico Advisory Committee

This essay is an excerpt from The Doomsday Book by Gordon Rothsay Taylor and conveys an urgent message about the urban environment and stress.

Last summer my wife and I (25) went canoeing in Algonquin Park. In January we went winter camping at Arrowhead Provincial Park. The purpose of both excursions were to 'escape' into the 'silence' of nature as we both sought the theraputic effects of quietude.

In Algonquin Park we had to put up with the drone of motor-boats and in the winter we found the only parks open for camping were also open to ski-doo's. In Algonquin, the sense of solitude was regularly disturbed by the sound of chain saws and logging trucks. Unless logging operations are restricted to Sept. 30 - April 30, lazer-beams used instead of chain saws, and Blimps used instead of logging trucks for hauling purposes, I fear that a licence to log in a park provided as a refuge from noise and machinery would greatly endanger our society. I feel that motor-boats and ski-doo's should be completely banned from all provincial parks.

Walter J. Delorey
Walter J. Delorey

HOW THE STRESS OF CITY LIFE SCARS OUR MINDS AND BODIES.

In 1916 four or five Sika deer were released on James Island, in Chesapeake Bay, half a square mile of uninhabited territory less than a mile from the shore. In 1956, when John Christian, head of the Animal Laboratories of the Naval Research Institute at Bethesda, Md., moved in, the herd had increased to nearly 300. Christian believed that animal populations are regulated by mechanisms that respond to population density. He did not have long to wait. In the first three months of 1958, over half the deer died. The next year, deaths continued until the population leveled off at about 80. This is about normal for a population crash: it quickly reduces the original population by about two-thirds.

The first interesting point is that the deer, though crowded, were not that crowded: the population density was about one per acre and the food supply was perfectly adequate. Why, then, had 190 deer died?

When he arrived, Christian shot five deer and examined them thoroughly. In 1960 after the population crash, he examined more deer and found that the adrenal glands were much enlarged by comparison with glands of the deer he shot in 1956. In immature deer the difference was strikingly greater: the adrenals were 81 percent heavier. Abnormal cell structure in the adrenals of these deer confirmed that they had died from stress, as Christian suspected because he knew that adrenal glands enlarge in response to continued stress.

The idea that stress might be a factor in regulating population first surfaced in World War II. As early as 1939 it was observed that some snowshoe hares were dying in convulsive seizures, while others were lethargic or comatose. When dissected, the hares were found to have hemorrhages of the adrenals, thyroid, brain and kidneys, with fatty degeneration of the liver. Strikingly enough, American prisoners in Korea also sometimes became lethargic or died from convulsive seizures; the disease was dubbed "give-up-itis."

The Rev. Thomas Malthus, the English economist who became a pioneer in the study of population, propounded the idea that populations expand until they outrun their food supply. His fears that population growth might lead to starvation in the near future proved wrong because - economists are fond of saying - the output of food was enormously increased by the development of fertile lands in the New World and Australia, coupled with the growth of industrialization and improved farming techniques.

But many observations suggest that, even in animals, starvation is not necessarily the population-limiting factor. Another factor is predatory behavior: yet it has been noted that jackrabbits die off even where there is plenty of food and the number of predators is no larger than usual. Similarly, mice kept in cages at the University of Wisconsin fluctuated in numbers, although there were no predators and they had plenty of food.

Biologists have learned that animals have evolved many mechanisms for avoiding population increases that permit starvation to become a threat. For instance, flour beetles, when crowded, produce a gas that is lethal to their larvae and also anaphrodisiac. Many species kill and even eat their young when conditions become crowded: infanticide was also practiced by primitive man. Dr. Hudson Hoagland of the Worcester Foundation declares: "In all species experimentally investigated, the mortality is found to be dependent on population density and to cease below a certain critical population density."

The current view is that populations explode when methods of regulating them break down. Then starvation may become the regulator, unless the pressure can be relieved by migration. If, however, rapid population growth leads to serious crowding, stress may prove to be the limiting constraint.

Man is in no way exempted from the laws of population growth. He has until now been able to expand into new territory, thus avoiding the buildup of stress. But now expansion is becoming very difficult, while his preference for living in ever-larger cities introduces a new element. Is it now likely, that he will be constrained by stress more than by starvation? In either case, biology suggests that the population will not merely press against the limits, as Malthus supposed, but will decline catastrophically.

Fred Hoyle, Professor of Astronomy and Experimental Philosophy at Cambridge University, calculates that the crash is due in 2250, when, he thinks, world population will have reached 25 billion - but demographers expect this figure to be reached before 2070 at present rates of growth. When the crash comes world population will collapse to a mere 2 billion, and the cycle will repeat itself every 300 years. (This means that the world population will increase by 22.5 billion in the next 100 years, and that 23 billion people will die during the crash.)

If mankind spread itself out as thinly as possible over the habitable land surface of the world, each man, woman or child would find himself about 150 yards from his nearest neighbor. By the year 2070, the distance will have shrunk to 60 yards. When the deer on James Island began to die of brain hemorrhages, they were about 80 yards apart.

But man does not spread out thus; he crowds into cities, complicating the question of stress. He is, in addition, unevenly distributed among different countries or areas. The United Kingdom (at 570 persons to the square mile) appears more densely populated than India (385 persons to the square mile), and very much more than the U.S. (58 persons to the square mile). But the United Kingdom includes mountainous Scotland and Wales, where only the valleys are habitable, and underpopulated Ireland. If we take England alone, the figure rises to 910 persons to the square mile, which handsomely exceeds India's Madras State (about the same area) and is probably the highest for any administrative unit of comparable size in the world.

The significance of such figures becomes clearer when we consider the growth of cities. Professor Kingsley Davis, head of the International Population and Urban Research Center at Berkeley, Calif., calculates that by 1990, more than half the world's population will be living in cities of more than 100,000 inhabitants. Between 1920 and 1960, the world's urban population trebled, while its nonurban population rose only by one-third. In developing countries cities are growing at a terrifying rate. The biggest spurts have been in South America, where 21 million now live in cities of one million or over: in 1920 there were no cities of one million. The doubling time is often about 15 years, sometimes less.

What conditions will prevail in such mushrooming cities? Are they likely to impose intolerable stress on the occupants?

In America and Britain, physical conditions in cities are, in general, inferior to those in towns. Studies show that cities receive 15 percent less sunshine on horizontal surfaces (and 30 percent less ultraviolet in winter) and 10 percent more rain, hail and snow. There are 10 percent more cloudy days, 30 percent more fog in summer, 100 percent more fog in winter.

The incidence of many diseases is markedly higher in cities, and not simply infectious diseases. In cities of a million population or more, lung cancer is just about double the rural rate. The bronchitis rate is also much higher.

More significant are crime and mental sickness rates. A classic study was carried out in Chicago in the 1930s. The city was divided into 11 areas, and rates were established for each. In every case, the rates were high at the center and declined steadily as one moved away from it. Thus there were 362 cases of schizophrenia per 1,000 in the center, and 55.4 per 1,000 on the periphery. There were 240 cases of alcoholic psychosis per 1,000 in the center, and 60 at the periphery. Crime, suicide, drug-taking, all showed a similar pattern.

Even at the periphery the rates were higher than in small cities. Studies made in Providence, Rhode Island, showed schizophrenia ranging from 45 to 0 per 1,000, as against Chicago's 362 to 55 per 1,000. Closer study showed that the rates were linked with the level of social organization in the cities. Rapid growth, especially where there is movement in and out or between different areas in the city, seems to create high crime and mental sickness rates.

In short, it seems certain that the mushrooming cities of the immediate future will be plagued by crime and mental disturbance of various kinds. Unquestionably, these aberrations are evidence of severe stress. But cities exert stresses over and above social disorganization and greater risks of disease.

Among the stresses imposed by the city is noise - which we are ill equipped to regulate because its effects are hard to measure. But because humans interpret sounds in terms of their possible meaning, those that suggest danger cause alerting reactions, with adrenal discharges, and adrenal reactions are precisely what we are on the watch for. A loud noise is one of the three things that alarm a newborn baby still innocent of experience.

Professor Joseph P. Buckley of the University of Pittsburgh conducted experiments in which rats were subjected for several weeks to the sounds, on tape, of compressed air blasts, bells, buzzers, etc., at high intensity for half a minute every five minutes. Flashing lights and oscillation of the cage were also introduced, and the stress period continued for four hours a day. All rats developed hypertension within three months, and many had enlarged adrenals. Some died. Incidentally, tranquilizers not only failed to block the effects of stress, but actually increased the death rates.

Other experimental work by Dr. Lester Sontag at Yellow Springs, Ohio, showed that the fetus within a pregnant woman can perceive sounds and that its heart rate changes after exposure to sounds; it is also affected by changes that noise produces in the mother. Dr. Sontag concludes that we need to be concerned about the possibility of fetal damage from such violent sounds as sonic booms. "It seems not unlikely that adults are not alone in their objection to such noxious stresses. The fetus, while he cannot speak for himself, may have equal or greater reason to object to them."

These recently uncovered facts demonstrate, once again, how calm we remain about the possible danger of insults to our system - until the consequences can no longer be shrugged off.

I suspect that an even more important stress factor than noise is the mere presence of strangers. In many languages the word for stranger and the word for enemy are identical. For countless generations man has been conditioned to regard the stranger as a potential threat. In urban life, we encounter strangers continually every day. Some psychiatric evidence confirms the idea that every stranger arouses a degree of unconscious alarm, which we conceal, even from ourselves, by various social formulas. Every traveler knows how exhausting it is to meet strangers socially, day after day, however friendly they may be. I suspect that research will show that people prefer to put limits upon the number of contacts with strangers, and that cities impose stresses by obliging their inhabitants to exceed these limits.

Lacking research in these areas, we are obliged to study the pathology of overcrowding in animals.

Crowded animals exhibit signs of adrenal stress accompanied by failure of maternal behavior. Litter size falls and embryos are sometimes resorbed (reassimilated by the mother's body). As maternal care diminishes, infant mortality rises. The newborn are underweight and their growth is stunted. Meanwhile the males become more aggressive, sexually and otherwise. At 50, or even 100, per acre, rabbits show few signs of stress. But at 200 per acre, death rates rise dramatically.

John B. Calhoun, A Scot, carried out some famous experiments with mice and rats. He found that rats placed in a quarter-acre enclosure increased in number until, after 27 months, there were 150 of them. The population then leveled off, because of high infant mortality.

Subsequently, Calhoun ran experiments in which the numbers of animals were kept constant at very high densities by removing the young as they were born: he kept 80 rats in a cage 14 by 10 feet. These rats displayed the usual male aggressiveness and inadequate maternal care that characterize overcrowded animals, but with some strange additional features. Bands of young males roved about assaulting the females, frequent homosexual behavior occurred among both males and females, and dominant males engaged in tail biting of other males. Many people thought they saw similarities between such behavior and that of modern city-dwellers of the human kind.

Calhoun also observed what he calls "pathological togetherness." Rats would get so used to feeding when other rats were present that finally they would refuse to feed unless other rats were also feeding. When he provided four intercommunicating pens, the rats crowded together in two of them, leaving the other two largely unoccupied. This further disrupted maternal behavior, and infant mortality, which had been around 80 percent, rose to 96 percent.

But the situation cannot be understood unless we consider the social structure that prevails in any group of animals, even caged mice and rats. Much has been heard of the "pecking order," first observed in hens, in which a hierarchy is established - Hen A pecking B, but not being pecked, B pecking C, etc.

More recently it has been found that such hierarchies develop only where animals are crowded to some degree. The more normal pattern is for animals to claim territories and defend them. Battles are fought to determine territorial ownerships, the losers being driven to the less suitable margins of the desired areas, where they often perish. Established territory is protected, but in time neighbors grow more friendly and tolerate a certain amount of trespass, though they attack strangers at once.

Human beings behave in a similar manner. While there is always some risk in arguing from animals to man, Dr. Paul Leyhausen, a leading German ethologist, believes that a true homology exists between man and animal in this area. Certainly human beings have strong territorial instincts.

When animals that have no "pecking order" are crowded together, a rigid hierarchy begins to develop and finally becomes so tyrannical that even the dominant animal at the top of the social tree is stressed by the repeated challenges from subordinate males. Calhoun's rats exhibited dominance and territoriality. At the bottom of the social scale were rats that withdrew from the struggle and avoided stress by never challenging superiors and going out to eat at times when the latter were asleep, in order to avoid trouble. (Human "night owls" are also known.) In the middle rank were males who constantly challenged the dominant males, in an attempt to obtain territory and females; these were the ones most likely to show physiological signs of stress.

So we may imagine that the class resentments of modern urban society present a parallel to the challenges of the pecking order in animals, and are most likely to develop where there is pressure on space. Human beings have a strong need to limit the number of social stimuli they receive, and they often retire to their "nests" or to uncrowded territory for this purpose.

Modern urban society may reasonably be suspected of imposing stresses similar to those that stressed Calhoun's rats, and the parallels in behavior are probably not coincidental. Rene Spitz has shown, for instance, that human mothers in crowded conditions exhibit poor maternal care; the "battered babies" that constitute one current social problem may be a consequence of living in crowded conditions.

Paul Leyhausen says: "I have no doubt whatever that a great number of neuroses and social maladjustments are, partially or totally, directly or indirectly, caused by overcrowding. What every normal man wants for himself and his family is a detached house in an adequate garden, with neighbors close enough to be found if needed, or if one feels like a social call, yet far enough away to be avoided at other times."

Psychologists often talk of people adjusting, or failing to adjust, to modern life - as if man's power of adjustment were unlimited. But psychological requirements represent the result of millions of years of evolution, and adjustment can only occur within the limits set. It is true that children can be habituated to living in crowds, just as they can be habituated to particular foods, amusements, or sexual patterns. But a price is paid for addiction to crowds, just as for addiction to chocolate candy. Leyhausen thinks there is real danger that many may "exceed the limits of human tolerance towards the presence of other humans."

The test is not whether people feel safe in crowds, but whether bodily, mental and social health are preserved in such conditions. Leyhausen believes that people can only participate effectively in a democracy when they can withdraw to their own territory for relaxation and consideration. Calhoun makes a similar point when he says, "The process of identifying with values and goals beyond the bodily self requires periods of solitude and reflection." In the absence of this, many becomes "a hollow, sterile shell." In the quite different context of industrial psychology, it has been noted that employees make radical decisions, such as to leave their jobs, after vacations during which they have time to reflect. Crowded conditions thus favor a loss of social cohesion and responsibility. Calhoun even suggests that the attraction of psychedelic drugs is that they restore a sense of personal space to people who feel "hemmed in."

The weight of this evidence, then, supports the idea that urban society already shows signs of the effects of overcrowding but hasn't reached the point at which infant mortality rises so sharply as to limit the population. This is due partly to modern medicine and to government intervention when a mother ceases to care for her children, and partly also to the fact that population densities still fall short of those at which crisis behavior becomes general. Unlike rats, man can get out of the city from time to time. At least some can. (It may be significant that the deer on James Island had their population crash during a winter in which ice floes prevented them from swimming to the mainland.)

The fact that so many people endure up to an hour of crowded travel twice a day in order to live out of the city though they work in it provides some indication of how reluctant they are to live in the center. The man with a family, especially, feels that his wife and children benefit from the more spacious and natural surroundings at the periphery. Those who do not commute maintain, if they can afford it, a weekend cottage or perhaps a boat, and annual vacations are usually taken "away from it all."

Because of this reluctance to live in the city, around every city there grows up a ring of lower-density housing that we call "suburbia," and outside this a ring of what is technically country, inhabited predominantly by weekenders and wealthier commuters, for which the name "exurbia" has been coined. Suburbia has the advantage of providing access to the city on one hand and to the country on the other.

The trouble starts when the exurbia of one city coalesces with the exurbia of another. This is what is happening in the New York - Washington strip, with Baltimore fringing on Washington to the south and on Wilmington, which adjoins Philadelphia, to the north, while Trenton and other suburbs fill the space between Philadelphia and New York. It is calculated that by the year 2000, the entire 500-mile strip between Boston and Washington will be suburbanized. By the year 2010, the New York metropolitan area will comprise 30 million people at a density of 24,000 to the square mile, though the urban core will include only 8 million. Similar fusions are occurring in California, where the San Francisco-San Diego strip is already partly exurbanized, and south of the Great Lakes.

At the same time, as the central area grows, routes become more congested and the distance to the countryside grows longer. Escape becomes harder.

As a result of the disagreeable features of urban life, there is an increasing tendency for the countryside to be regarded primarily as a resort area for the refreshment of city dwellers. The policy of treating the country as a resort area for the towns will destroy its rural character, as has already happened in exurbia.

But it is not the fate of the countryside that concerns us here so much as the question of how long the countryside will remain adequate to provide the townsman with the relief that preserves his sanity. In the United States, the National Park system is already hopelessly overburdened. One must book months ahead to get into Yosemite and other parks. There were more than 100 million park visitors in 1968, compared with 3 million in 1948. More and more trails have to be covered with blacktop because they cannot stand up to the pedestrian traffic.

As work weeks get shorter, vacations longer and car ownership even more general, the wilderness will come under ever greater pressure. By 2000 there will be few corners of the U.S. where nature can be enjoyed undisturbed. This deprivation will be especially severe in the San Francisco region, where population is expected to grow 900 percent by the year 2000. This means nine times as much litter on the trails of Yosemite and nine times as long a wait to get in.

Do people need the wilderness? It is often asserted that they do. We must recognize that people prefer certain levels of stimulus, and this varies from time to time, as well as from person to person. In choosing a place for a vacation, one person will say, "I want peace and quiet;" another, "I want life." People who have been overstimulated want understimulation, and conversely.

But if reduced stimulation were all that were required, a dark room would suffice. Besides, the man who enjoys the wilderness is not understimulated; his senses are alert to colors, sounds, shapes, odors, textures and other impressions. The appeal of nature has been succinctly expressed by such poets as Wordsworth, who stresses its moral and re-religious characters.

One impulse from a vernal wood
May teach you more of man,
Of moral evil and of good,
Than all the sages can.

More recently, Freud discussed this topic under the title "the oceanic feeling." There is no need to delve here into the origins of this feeling; it is enough to note that the experience is a religious one and of central importance to those who experience it. I would even argue that it is of central importance to us all, those who fail to experience it being the victims of a psychological disability akin to hysterical blindness.

When the British Institute for Biology called a conference on the Optimum Population for Great Britain in September 1969, almost everyone present agreed that the country was already overpopulated. The fact that almost every member of a well-informed audience of over 100 felt that Britain was not at its optimum population, but decidedly over it, suggests that it is possible to evolve a social policy.

To be sure, the optimum population of a country cannot be expressed merely as a figure; how the inhabitants are distributed is vitally important. Parts of the U.S. today are certainly underpopulated.

What interests each of us is the area we normally move about in, say a radius of 50 to 100 miles from our home.

With this caveat, I believe we can detect three main kinds of criteria for defining an optimum population.

The commonest criterion is the economic, which tends to favor a relatively high density. A bigger population provides a bigger market, supports a richer social and cultural life, and so on. The economist recognizes a limit when pollution, traffic congestion and other economically measurable factors begin to undermine economic benefits.

At the opposite pole from the economic is the biological set of criteria, according to which the land should not carry more people than it can support without the consumption of irreplaceable resources such as fossil fuel.

Between the economic and the biological criteria lie the psychosocial criteria, which I have attempted to discuss: the need to avoid loneliness on the one hand and feeling "hemmed in" on the other. These I think call for levels of population intermediate between those suggested by economic and biological criteria.

Taking an even longer view, the rate at which all irreplaceable resources are being consumed is a limiting factor. In this context, a special committee of the U.S. National Research Council has concluded that there are already too many people on earth. Irreplaceable natural resources are simply not sufficient to meet future demands.

Finally, let it be noted that even if we decide that the world, or any large part of it, has not yet reached an optimum population density, there is still the question of how rapidly it is sensible to move toward that level. Too rapid growth creates strains, as we have seen, and I conclude, with Professor Athelstan Spilhaus: "When we can treat all existing persons as human, it will be time enough to think about having more."

A Brief Re: The Use Of

"QUETICO PARK"

Prepared By:

THE ATIKOKAN SENIOR CHAMBER OF COMMERCE

*This Brief was prepared, presented
and adopted March 4th, 1971 by a
majority of the Membership of the
above association.*

the Quetico Park Advisory Committee,
R. T. Thompson, Secretary,
Fort Frances, Ontario.

BRIEF RE USE OF QUETICO PARK

In conclusion the Atikokan Chamber of Commerce recommends to the Quetico Park Advisory Committee the following items for their consideration in forming a "Master Plan" for Quetico Provincial Park.

1. The Quetico Provincial Park recreational values be protected consistent with good regenerable resource management.
2. The present licence to log in Quetico Park issued to Jim Mathieu Lumber Ltd. be continued so long as the sawmill at Sapawe is operated and the Mathieu limits outside the park are being used to their allowable limit and this restriction should apply to successors of the present owners of the Mathieu Corporation.
3. Improvement of existing regulations and restrictions on cutting and adequate enforcement by the Department concerned.
4. Opening of the Jean Working Circle for controlled logging only after submission of well established plans that will ensure the protection of the recreation values of the area.
5. Establishing of additional entry points off highway 11 including Beaver House Lake by access road, from highway 11 and Lerome Lake adjacent to Highway 11.
6. Establishment of a quota system and/or a sizable differential for fees weighted in favour of entry to the park from the northern sector of the park as opposed to entry from the international border points.
7. Adequate aircraft and people to insure that laws governing the park are enforced and that users have properly entered.

8. Adequate census of wild life in the park to ensure that sufficient forage is maintained or that surpluses are killed by controlled hunting.
9. In promoting Quetico Park emphasis be placed on entries from the northern perimeter.

In support of our conclusions we are submitting our thoughts and reasoning. While no Member of the Brief Committee canoed the water in the area of the existing logging operation and because of lateness of the Advisory Committee's request for briefs, we did not make a ground or aerial inspection before snow fell. We did however inspect a large portion of the cut inside the park and outside the park and got opinions oral and written from loggers and others - woodsmen, tourist operators, foresters, and laymen.

The park does contain some unique recreational values but at present is not wilderness, is not primitive, and probably contains no primeval stands of forests. The fact that none of these conditions exist probably mean that more people are getting more enjoyment out of the park. Wilderness on the perimeter water is disturbed by outboard motors and aircraft. Primitiveness is precluded by the establishment of a well used camp sight on French Lake, and forest fires probably hit every last square mile at one time or another in the past hundred years which eliminates for ever a primeval forest.

ATIKOKAN with its economy about 70% dependent at present on rapidly depleting mines is looking forward to other resources, notably logging, tourism and new mining situations and possibly secondary industry after the cessation of mining should the labour pool be available. Therefore the use of the resources and preservation of recreational values are very important to this community and area.

There is some reason to believe that all of the care necessary has not been used on the Mathieu rights in the park to preserve as best possible the recreational values, however, we believe that both the Department concerned and the licensee are aware of the problems and that planning will be more careful. While we tested only one area we believe that sky line reservation works very well and this method will be used extensively. Compared with the 4,600 acre Burn in the Sagnagon Lake area ten years ago, the reforested more recently cut areas look much better and present a more acceptable shore line scene. Special care must be taken in selecting the location of bridges and roads in the areas of portages and cutting in the area of portages. Evidence of abundant wildlife in the cut over areas can be seen and concern for over population will be necessary.

The Mathieu sawmill operation which is dependent upon park sources for up to 40% of its requirements to maintain an economical two shift operation employs upward of two hundred people and is a very important 25% factor in the Atikokan economy. It is important to this community to have this sawing and logging operation continue regardless of ownership. Park resources should be used simultaneously with allowable cuts on other limits in order to sustain the Mathieu operation.

No good reason for the government decision to eliminate cutting in this Jean Working Circle has been given. No doubt it was politically expedient to give in to eastern and U.S. pressure groups. Our information is that the J.W.C. will yield about 5% of O & M's annual wood requirements but in so doing will provide this district with a slightly more efficient industry and will keep about fifty jobs in Northwest Ontario as opposed to either Manitoba or Minnesota or both. If we want industry to establish here then we must be prepared to support them and follow through with our commitments on which their premise to establish were founded.

The advisory committee must also give consideration to the control of disease which is found in mature stands and eventually will kill off the forest if it is not cut or burned. Great Lakes Paper does extensive spraying for Budworm on its limits adjacent to the east perimeter of the park. Evidence of Budworm is appearing in the park and some method of control will have to be implemented or the forest will be of no commercial value and an unsightly blemish for recreational uses.

The recreational value of the park is probably reduced because of the high intensity of use of some areas particularly those close to the U.S. border. It is obvious that from the number of entries that there is certainly some demand for use of the park as a playground. *We were not able to uncover any conclusive motivation studies so we assume that the park is a recreational bargain or that it has unusual recreational values. Let there be no misunderstanding about our intentions. We are in no way suggesting that foreigners be kept out of the park; however, all reasonable precaution must be taken to ensure that a fee is collected for use commensurate with the value received. It is the opinion of this Chamber that entries from the International border yield not enough direct revenue to pay for the upkeep per user. The user enters the park, pays a maximum of \$6.00 plus fishing licence, and not only is he under charged for the services received, he has to bring all of his requirements with him from the U.S.A. and these may or may not come under tariff regulations. Whereas if foreign users entered the country clean they would be somewhat obliged to outfit themselves in part in Canada and make some contribution to the local economy. Alternatively let the fee for entry from the U.S. border to the park take into consideration that a benefit is being conferred and charge accordingly for a foreign float in entry.*

Such a restrictive policy will not affect U.S. based operators. They have a much larger forest preserve adjacent to Quetico which will quite easily support their operations.

In order to accommodate the additional load of users that would be entering from the Northern perimeter more entry points will have to be established probably at Lerome Lake which offers an excellent possibility for both starting trips and overnight camping and Beaver House Lake which will require completion of a road off highway 11. These additional entry points will disperse the users over a wider area. The Department of Lands & Forests and the Department of Tourism and information should re-plan its literature and concentrate on all Canadian trips.

This Chamber feels that the Quetico Advisory Committee should look seriously at disallowing the use of out-board motors except in perimeter waters and waters adjacent to established park campsites such as French Lake.

In preparation of this brief, the Chamber has attempted to keep in mind the best use of the park for the most people now and in the future.

National and
Provincial Parks
Association of
Canada

L'association
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et provinciaux du
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A BRIEF TO THE QUETICO ADVISORY COMMITTEE

-from-

THE NATIONAL AND PROVINCIAL
PARKS ASSOCIATION OF CANADA

March 2, 1971

To: The Members of the Quetico Advisory Committee

Gentlemen:

The National and Provincial Parks Association of Canada was incorporated in 1963 as a non-profit organization for the purposes of encouraging the protection and preservation of parks having outstanding natural and/or historical significance, the development and expansion of new parks and the promotion of public appreciation and understanding of park values. The only national organization concerned solely with these objectives, the Association in Ontario acts through its Ottawa/Hull Chapter and its Ontario Standing Committee. The Committee is made up of persons from a number of organizations, but acts as an independent body. The role of the Committee is to function as a liaison and to disseminate ideas, views and factual information on parks and park problems in Ontario. The Committee welcomes this opportunity to submit this brief on the status of Quetico to the Quetico Advisory Committee.

As there has been such a challenge to the basic concept of a park in Quetico, it might perhaps be useful to begin at the beginning.

Is there any necessity for a park in Quetico ?

To our knowledge, no body has publicly opposed a park in Quetico. Nevertheless, some organizations are perhaps inhibited only by the assumed public reaction to such a stand and the question is thus worth asking because

it raises the central question: if there is to be a park or recreational role for Quetico, should it be subordinate to one or more other uses ? On this basis, a park is no doubt acceptable to the forest industry. Assuming for a moment that the answer to the question is, in the broad sense, affirmative, then the next question is:

What sort of park should be maintained in Quetico ?

As a cursory glance at the topography of the area will indicate, it is no accident that, historically, Quetico has been a wilderness or semi-wilderness park with recreational uses limited to boating, fishing and canoeing. Geographically, Quetico exhibits an enormous number of small intimate lakes, many of which are reached by river systems. Most of the other lakes can be reached by portages of varying degrees of difficulty and length. The number and variety of canoe routes are extraordinarily high considering the total area of only 1,750 square miles. In spite of the fact that a good portion of the Province is in Shield and boreal forest country, there is very little of it which presents so compact an area with these canoe tripping advantages. River systems allowing canoeing for great distances there are, but rivers generally allow travel in one direction and on one route. Quetico, on the other hand, allows an amazing number of repeat visits utilizing different routes or parts of routes each time and this in an area which can be canoed from boundary to boundary in three days. In addition, Quetico is accessible

by road and so can be enjoyed by those having limited money and time at their disposal. This point should not be overlooked: Canada still has good canoeing areas, but many are accessible only to the "elitist" traveller. In addition, the Quetico is historically, as well as ecologically, interesting and important. All of this adds up to an area which is unique, not only in Ontario, but all of Canada and perhaps no other wilderness area in Canada exhibits so many advantages for canoe tripping. If this use is to be maintained, the answer to the question is that the area should be a wilderness park for use primarily by canoeists. Under present definitions, such a park would be classified a primitive area.

What other uses can or should be allowed in the park compatible with a recreational canoe tripping use ?

Those who actually indulge in wilderness canoe tripping are insistent that the wilderness experience is sullied or shattered by the assault on the eyes, ears and nose of man's activities. As a practical matter (government policy prohibiting mining, if not mining licences), the activity within the park which upsets the wilderness experience is commercial lumbering. There seems to be no disagreement that modern commercial lumbering operations in a boreal forest area like Quetico require a high degree of mechanization evidenced by massive machinery and equipment, high quality roads to allow access by such machines and equipment and clear cutting as opposed to selective cutting. No one who understands the experience looked for by a

canoe tripper can possibly maintain that commercial logging is in any way compatible with these activities.

Many in the forest industry would agree or would at least admit that such activities have some adverse effect on the wilderness experience, but would maintain that notwithstanding, society is better served by forest industry activities than by recreational canoe activities and therefore, if the two activities clash, the former must prevail. Is then the setting aside of Quetico as a primitive park an impractical gesture for the selfish advantage of a minority of the population ? To answer this question, certain criteria must be kept firmly in mind:

(a) Quetico is a miniscule portion of the area of the Province - less than one percent of the merchantable timber area of Northern Ontario;

(b) the possible sustained wood yield from the park is a tiny proportion of the provincial annual allowable cut - about 10 million cubic feet to 2,730 million cubic feet;

(c) the Government has stated, and the forest industry has concurred, that there is plenty of available timber outside of the park boundaries to replace the Quetico cutting limits;

(d) the work provided by Quetico timber operations presently keeps employed about 250 men. This is not a large figure and relocation might not cost any of these jobs. In any event, mechanization of timber operations proceeds and at least one official of a paper company has readily admitted

that there will be no hesitation in replacing men by machines when the economics of the situation warrant.

In short, a ban on cutting in Quetico will have so little effect on the timber industry that one can only conclude that the issue boils down to one of principle and attitude and thus, the first question asked in this brief - is there any necessity for a park in Quetico? - is not as frivolous as it might first appear. The proponents of logging paint with a broad brush so that an interested but uninformed observer is left with the impression that some wild-eyed group is attempting to preserve from the industry some gigantic area of the Province with resulting significant and unpleasant effects on the general standard of living. This is so far from the truth that one is driven to the conclusion that Quetico is not the real issue and that the principle of commercial forest exploitation wherever wood is available is the real issue. This would appear to have been the attitude of the Department of Lands and Forests in the past. Timber licence boundaries historically pay no heed to park boundaries.

This Committee submits that this policy is no longer good enough and that a large and increasing segment of the population want the policy changed. Apart altogether from public feeling, the need to preserve at least some of our vanishing wilderness on aesthetic, spiritual and even economic grounds seems incontrovertible. It is almost inconceivable that argument at this time must be directed to the very existence of Quetico as a wilderness

park. No park issue will ever be so clear and free of complicating factors. If the committee does not come down on the side of a primitive park for Quetico and the Government does not change its policy, and quickly, then there is no hope for a reasonable and balanced parks policy for this Province. The problem is important, and immediate. Only when Quetico is definitely and permanently established as a primitive park free forever from all forms of commercial exploitation, will we be able to turn to the question of buffer zoning, forest management, carrying capacity, motorized vehicles and boats and the numerous other urgent and vital problems in regard to which time is running out. However, these matters must await the basic policy statement we urge this committee to make.

Respectfully submitted,

Ontario Standing Committee of the
National and Provincial Parks
Association of Canada

March 4, 1971

A BRIEF ON QUETICO PROVINCIAL PARK

To Mr R.T. Thompson,
Secretary Quetico Park Advisory Committee,
Ontario Department of Lands and Forests,
Fort Frances, Ontario.

My name is Abbott Conway. I am President of the Algonquin Wildlands League, an organisation whose objective is the preservation of wilderness. The League has submitted a brief to you on Quetico Park. The views expressed herein are personal and do not form part of the League's submission.

For some years passed I have been concerned about the take over by commercial interests of readily accessible wilderness areas in the Provincial Parks of Ontario. In my opinion this is resulting in a poorer quality of life for the citizens of this Province.

On the one hand we have the increasing pressures and limitations of more intensive urbanization on the other we have congestion and various sorts of pollution including noise, pollution in what were traditionally quiet holiday areas such as Muskoka and Harry Sound. In addition we have seen the intrusion of mechanized logging into the heartland of our large Provincial Parks which were at one time considered by the Department of Lands and Forests to be held in trust for the people of Ontario so that they might find in them, quiet, solitude and the enjoyment of natural surroundings.

From 1916 to 1962 I lived in Huntsville, Ontario. Following World War 2 I did considerable travelling in Algonquin Park both in winter and summer. I found that such trips could do much to ease the strain of operating a difficult type of business that was going through difficult times.

However, it was not until I moved south to the Acton-Guelph area that I realized how deep is the need for outdoor recreation of people who were caught in the complex urban environment, and how many there were who sought to be near wilderness - or their idea of wilderness - in order to escape the sights, sounds and smells of city life. In many cases their image was formed by reading the literature on our major Provincial Parks which was distributed by the Department of Lands and Forests. This literature contains many beautiful descriptions of unspoiled primitive areas. It was natural that they should turn to these major parks to fill their needs.

As opposed to the clamour of city life, they were promised quiet. As opposed to the city's oppression of individual against individual, they were promised solitude. As opposed to the daily grey monotony of concrete, they were promised natural surroundings. As opposed to the emasculating dependence on utilities and services, they were promised an opportunity

to experience a sense of personal achievement in the out of doors.

What they found and what they are finding is modern commercial logging which is the antithesis of these four promises. Its machinery disposes of quiet and solitude, its method makes mockery of natural surroundings, and its roads effectively dispose of the feelings of personal achievement. Who can feel satisfaction on the completion of a difficult journey to a remote point when one finds it is connected to civilization by a wide gravel road?

The Department of Lands and Forests justifies this intrusion under the principle of multiple use which it is Department policy to apply to all the major Provincial Parks except far away Polar Bear. I submit that such a policy is short sighted and wrong.

Excluding Polar Bear Park and the District of Patricia, which are lands too inaccessible at present to be of recreational use to most people in Ontario, our large Provincial Parks - Algonquin, Quetico, Lake Superior, Missinabai and Killarney represent only about 2% of the remaining area of Ontario. Multiple use should include some land that is zoned primitive. 5700 square miles out of approximately 280,000 square miles would not seem an unreasonable figure. The 5700 square miles would be reduced by 1500 square miles if only one half of Algonquin were zoned primitive as suggested by the Algonquin Wildlands League.

It has been said that, if you are going to apply the principle of multiple use to each and every area which is administered by the Department of Lands and Forests regardless of size, ultimately you should cut up part of the Minister's desk for firewood.

I wish to urge this Committee to zone the whole of Quetico Park as Primitive and discontinue commercial logging in it. It can be done now more easily than it can be done later. Alternative forested areas outside the Park can be found to replace the old Jim Mathieu limits. Dislocations to woodworkers and sawmill employees can be minimized. But, even were this not the case the end would justify the means. Industries come and go. Their management is an important responsibility. But we hold land like Quetico in trust for future generations.

Quetico is indeed a priceless trust. It is part of our history and our tradition. It is true that it has been partially cut over in the past. But now the recreational need is great and will become greater. It should now be left to rest and to give rest to those who travel its waters and forest trails.

I wish to thank the Quetico Park Advisory Committee for the opportunity to submit this brief.

March 1st, 1971

Abbott Conway
Abbott Conway.

BRIEF

TO: THE ADVISORY COMMITTEE ON QUETICO

SUBMITTED BY

A GROUP OF CONCERNED CITIZENS

TORONTO, ONTARIO

FEBRUARY 26, 1971

J.C. Griffiths
83 Bedford Rd.
Toronto 5, Ont.

On behalf of the undersigned citizens, we thank the Advisory Committee and its individual members for the opportunity to present our position with regard to Quetico Provincial Park.

In beginning, we wish to assure the Committee that our submission is entirely without political prejudice. We are solely concerned with the disposition of public lands and their present and future relationship to the needs of the people of Ontario.

This group, while it is homogenous in the sense that it is comprised of people who are all interested in the outdoors, nevertheless represents an extremely varied cross-section of occupations and interests. While we are perhaps more representative of business and industry than of the naturalists and conservationists, we are regardless, extremely concerned over the present situation for a variety of reasons which we hope to express. Because of our backgrounds and experience, our approach to this question has been more rational than emotional.

Because we are not "professional conservationists", we hope that we will be forgiven any inaccuracies in terminology and definition. We trust that this will not lessen the sincerity and depth of our concern.

Firstly, we will assume that we are all talking about wilderness in its broadest sense when we are speaking of Quetico. The difference of opinion seems to develop as to just what constitutes wilderness, and how it is to be utilised and maintained. It appears that government and the "timber interests" feel that logging is not incompatible with wilderness. We will contend most strongly that it is.

Quetico is a symbol to the people of Ontario (even for those who have not been there, or may never get there). This stems from its historical connections, its literature, its scientific importance, its recreational values and its aesthetic beauty, its wildlife, its unique position as perhaps the only accessible wilderness area, or nearly so, left to the public of this Province. This symbol must not be destroyed, and despite the arguments of government, this is exactly what is happening, in the public view.

We have noted with interest, over the past few months, the tremendous amount of coverage in the media in the form of articles, reports, and letters from the public. We are impressed by the volume of public sentiment that this question has aroused, and it would appear to us that this is becoming an issue on which the people feel most strongly. In our efforts to study the situation from both sides, we have failed to find much valid argument for the maintenance of present policies. In fact, we discover an alarming lack of any constructive parks philosophy and policy. Our parks should be for the use and enjoyment of the people of this province. We fear this is not altogether so. The parks certainly are not for "resource exploitation" and "commercial activity".

While we believe that the Ontario parks classification system is a good beginning, we were shocked to discover that, while the classification of "Primitive Park" exists, there is not one such park in Ontario, with the exception of Polar Bear Provincial Park, which is so inaccessible that it cannot be considered in these contexts. Quetico should and must be re-classified at once, as being most suitable to this category. Its unique character must not be destroyed. Such wilderness is a vital part of our culture and heritage. It has had an enormous influence on our art, literature and history.

To people, parks mean unaltered areas in their natural state. We have seen, ourselves, to our great disappointment, what has happened to Algonquin Park. And we are all too well aware of the destructiveness of mechanized logging. The construction of logging roads leads inevitably to irresistible pressure that they be opened to public use eventually with the attendant result of garbage and pollution that would spell the end of Quetico or any other park of like character. We were delighted to see the withdrawal of the volume agreement in the N.W. quarter; we were less pleased to find the continuance of logging in the some 400 square miles of the N.E. section. We are not impressed by the argument that "less than one percent" (of the total park area per year - correct?) is being cut. Our position is that timber licences must be terminated, mining claims extinguished, and the Park re-classified as Primitive, which means, to us, no roads, no motorboats, and no snowmobiles.

The question of local employment is irrelevant to the situation as a whole. We suspect that automation in the timber industry necessitates a rate of job-attrition far greater than that of the exclusion of timbering from our parks. In any event, we are convinced that timber limits outside the Park could provide corresponding employment for those now involved within the Park, and any argument that this would be more costly to the timber companies simply raises our anger. Is government really prepared to subsidize the timber companies at the expense of the tax-payer and the publicly-owned parks? In fact, even now it is our impression that cutting in our parks cannot even be justified on the basis of profit. However, our parks are not set up to make money; at least that has not been our belief...and logging cannot be justified on that basis. In any event, the rationale of economic expediency in these circumstances is not acceptable, and can no longer be justified.

A few quotes, more or less verbatim, from government publications:

"established as a public park and forest reserve, fish and game preserve, health resort and fishing ground, for the benefit, advantage and enjoyment of the people of Ontario".

"one of the last great primitive areas on the continent".

"the largest accessible wilderness area in North America"

"protected against any disturbance which might cause the deterioration and destruction of the wilderness environment. Although much of Quetico has been exposed to early logging and fire, it is still a precious asset, preserved in a wild state...."

...How ironic...and how embarrassing! And the word is getting out...not exactly the thing to boost the tourist industry, which is, we understand the third largest industry in N.W. Ontario, and then there's not much else. With the fast-increasing need and pressure for recreational areas, we must have accessible wilderness. On one hand we are told that the northern half of Quetico is not used recreationally, and that logging is therefore "all right" but on the other hand we are told, from the same sources, that it may be necessary to "ration" because of increasing pressure. In the years to come, we are going to need everything we have, and more! Surely it is obvious that this anticipated pressure comes from people who are looking for wilderness in its broadest sense, not areas cut over and mutilated by commercial logging.

We have listened to all the arguments, pro and con, about timber management. We are told that over-mature trees pose a hazard from fire and disease (we wonder how the forests "managed" themselves before man's assistance?). We don't pretend to have the scientific knowledge to argue the point, but we are impressed by the view of the ecologists that this is part of the natural cycle; and we would prefer that our park be natural rather than a glorified tree-farm, managed for maximum timber harvest. If protective management is required, only the necessary remedial cutting should be done, and it should be done by the Department, not by commercial companies who have demonstrably different philosophies and methods. Commercial forestry is not compatible with wilderness areas. Parks management should most definitely be the concern of Parks Branch, not the Timber Branch. Another area of major concern is the inevitable deterioration, through logging, of the value of Quetico for scientific research, but we will leave this to others much more qualified.

The problem goes far beyond Quetico. It bears on the much larger question of management of public lands in Ontario; on the philosophies and policies of government in relation to the present and future needs of the people of this province. We recognize that a parks system requires a variety of parks of varying type and classification to fulfil all manner of needs. Obviously this is dictated in part by the nature and location of the area. The "multiple-use" concept has its place, too, but we contend, even here, that mining, logging, and commercial activity has no place. Within the larger framework, it is our position that Quetico, with its unique qualities, must remain wild and primitive. It must become the first reasonably accessible Primitive Park. Perhaps an alternative might be that it would become a National Park, but we would think that Ontario would prefer that Quetico could be the jewel in the crown of its parks system. However, time is running out. This is our last chance. Quetico must be salvaged now. The Government must act decisively in this matter. It is the responsibility of government to protect and preserve these areas, such as Quetico. To "sell" them to commercial interests is irresponsible and a negation of the public trust. Quetico must be saved and preserved in its natural state for future generations. We cannot accept less.

We thank the Advisory Committee for its consideration of our presentation and we commend its members individually for their most generous contribution in time and effort on behalf of the people of Ontario. We wish them well in their deliberations.

Respectfully,

Josephine L. Edwards.
Baker.

Minister of Health

John A. Carson

R. H. James.

C. E. Tracy.

L. G. Kane.

D. Royce

Bill Moore

Stanley M. Hawes
Kenneth C. Fere
Stettin.

Jameson.

Harold E. Hark.

B. B. Morgan.

William D.

W. S. B. Carter.

W. J. Dine

GAIL BORMAN

John B. Griffiths.

Ralph Selway
George E. Clark
Wheeler
C. J. Waterhouse
~~Willie Anderson~~
~~W. E. Mac Donnell~~
J. E. Phillips
Gordon French
Kearl Kato
Michael Powell
The Old Singing
in answer
to Papak.
H. N. Smith
F. J. Brown
L. A. Berk
Don N. Moore

Mary A. Griffiths
~~M. Griffiths~~
 Manssen
 N. O'Leary
 Lindlee
 Jones
 M. S. Kerner
 S. D. Kerner
 Kerner
 K. A. Kerner
 M. Moore

Wm. D. Brown
 The Handicraft
 ...
 ...
 ...
 Mary Moore
 ...
 ...
 S.B. Parker
 George H. Hester
 ...
 ...
 ...
 Star Line
 Harry Hall



Canadian Audubon
Society

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A Brief submitted by
The Canadian Audubon Society
for the consideration of
THE QUETICO PARK ADVISORY COMMITTEE
March, 1971

*

It is no coincidence that our national emblem is not a rising sun, a star, a hammer, a sickle or a dragon, but a beaver and a maple leaf. Nor is it coincidence that there are more paintings of wilderness lakes, spruce bogs and pine trees on more Canadian living-room walls than in any other nation on earth. We may scoff, we may deny, but the wilderness mystique is still a strong element of the Canadian ethos. And it is my belief that as urbanization continues in the future to fence us off from the natural world, our appreciation and need for wilderness will not dim, but will grow and assume a new form.

— Fred Bodsworth
in Wilderness Canada



As a national organization concerned with the management of Canada's natural resources in relation to human progress, the Canadian Audubon Society concentrates its attention on matters that either come under federal administration or are of general concern to the people of Canada as a whole. In the view of this Society, the fate of Quetico Provincial Park is of extreme interest to the people of Canada, if not to the world. We therefore welcome this opportunity of submitting this brief for the consideration of the Quetico Park Advisory Committee.

The unprecedented surge of public uneasiness over the future of Quetico that has been evident since the fall of 1969 has resolved itself basically into one question: Should commercial logging be permitted in the park or should it not? There are other important issues, such as over-use by campers, the presence of mining claims, the use of power boats, and insecticide spraying operations. But the question of commercial logging is paramount.

Commercial Logging

The arguments on both sides of the logging issue have been presented in public meetings, statements in the press and broadcast media, in submissions to Government agencies, in the Legislature, and will doubtless be repeated many times in briefs presented before this Committee. They include considerations for the intangible but very real values of human history, natural history, geology, ecology, recreation, aesthetics and potentials for scientific research offered by Quetico Park on the one hand, and the benefits of commercial exploitation on the other.

Suffice it to say that this Society endorses the October 3, 1970, resolution that Quetico Provincial Park be classified as a Primitive Park under the terms of the Department of Lands and Forests' "Classification of Provincial Parks in Ontario, 1967".

Quetico's unique attributes qualify it as a wilderness park of exceptional value, the like of which exists nowhere else in the world. The Canadian

Audubon Society is convinced that public opinion will require an end to commercial exploitation of Quetico sooner or later, that there will be no let-up in public out-cry until this is accomplished. The sooner this comes about, the easier it will be to make equitable adjustments in the economic and employment picture. Fortunately, and as opposed to the conditions prevailing in and about Algonquin Park, Quetico contains no commercial tree species that are not available outside the park; there is not yet a necklace of communities surrounding the park and dependent upon its timber; there is not yet an entrenched industry comprising dozens of highly mechanized logging companies in the park. But if past experience is any guide, these conditions cannot be expected to prevail indefinitely.

There are timber limits outside Quetico which can maintain the supply of pulpwood and chips for the Sapawe and Fort Frances mills, with no loss of production or jobs. We understand that moving outside the park would entail some increase in production costs, just as there are increased costs in pollution control, or protecting other irreplaceable areas such as the Niagara Escarpment. We have seen no detailed estimate of the increased costs, and suggest that this is an avenue that might be explored by the Advisory Committee. We do not think the industry or its employees should suffer financial hardship from relocation; we believe that the use of funds in the form of subsidies or tax incentives would be perfectly justified to effect the changeover as painlessly as possible.

Park Management

In view of statements that have been made by both Government and the industry, we are frankly fearful that when Quetico is classified as a Primitive Park, a massive therapeutic program may be considered essential to prevent the park from developing into "a forest slum" once it is left "untended".* A hastily undertaken program of tree-thinning and underbrush clearing, even though undertaken in the name of non-commercial ecological therapeusis, could produce the same unnatural disturbance of the environment as does the logging at present.

We can discover no need for rushing into an instant management program in Quetico. The problems of managing a wild area and keeping it wild are enormous in their complexity, sometimes unrecognized, and often riddled with paradoxes. Comprehension of the problems and the techniques for handling them are improving steadily, but all too often they are met on a crisis basis — pushed temporarily out of sight in panic, rather than prevented by foresight.

With this in mind we ask that the Quetico Park Advisory Committee give thought to the accelerated development of a special unit devoted to conducting research and developing policy for the maintenance of natural environments. This demands the application of the most advanced principles of ecology —

* "An untended stand of trees usually becomes a forest slum" — From Does Nature Have a Chance published by the Ontario Department of Lands and Forests.

in itself a multi-faceted discipline. Provision should be made for regular consultation with outside specialists in the many fields embraced by ecology, perhaps forming a technical advisory board. Where human values are concerned, authorities in sociology, demography, psychology, recreation and education should be called in as needed.

(Although focussed primarily on park environments, the environmental unit would have much to contribute to management policies for Crown lands under timber license or in recreational use outside the parks.)

Without such a team operating on a continuous basis, we can foresee only a steady increase in the frequency and severity of the problems that constantly harass the Department of Lands and Forests in the large parks — over-crowding by humans, wildlife management, pollution, inappropriate tourist facilities, boundary shifting, mechanized intrusions, road standards, and forestry practices.

Time is short, the need is urgent. The Canadian Audubon Society trusts that this recommendation merits the serious consideration of the Quetico Park Advisory Committee.

Summary

The Canadian Audubon Society respectfully submits the following recommendations:

- I. That Quetico Provincial Park be classified as a Primitive Park without delay.
- II. That a special unit be developed within the Parks Branch of the Department of Lands and Forests to conduct research and develop policy for the management of natural environments.

BOX NO. 114
POSTAL STATION Q
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FF 1

A BRIEF TO

THE ADVISORY COMMITTEE ON QUETICO PARK

PRESENTED BY

THE ALGONQUIN WILDLANDS LEAGUE

Committee hearings:

Fort Frances, April 5
Atikokan, April 6
Thunder Bay, April 7
Toronto, April 14 and 15, 1971



On Saturday, October 3, 1970, an event of considerable significance to the conservation movement in Canada occurred. On that date, representatives of the country's major conservation groups gathered in Quetico Provincial Park to demonstrate their concern over the deterioration of the wilderness environment in this magnificent park.

The Canadian representatives were joined by individual citizens, as well as representatives of leading conservation groups in the United States.

It marked the first time in the history of the Canadian conservation movement that representative groups had assembled together to discuss a specific issue - such was the concern over Quetico. The event captured international attention, interest and comment, which in itself was significant.

On this historic date the delegates passed a resolution for presentation to the Government of Ontario. The resolution, forwarded in a letter to the then Premier of Ontario, Honourable J.P. Robarts, read as follows:

"We request that Quetico Provincial Park be reclassified under the Classification of Provincial Parks in Ontario as a Primitive Park and that the Department of Lands and Forests immediately declare a moratorium on logging operations within said Park, thereby preventing any further deterioration of the wilderness environment."

The resolution was supported by the following organizations:

The Algonquin Wildlands League
National and Provincial Parks Association
Canadian Audubon Society
Federation of Ontario Naturalists
Pollution Probe, University of Toronto
Thunder Bay Field Naturalists
International Biological Program

In addition, an expression of support was registered by representatives of the following United States' organizations:

The Wilderness Society
Minnesota Natural History Society
Izaak Walton League
Friends of the Wilderness
Sierra Club

Also in attendance at this meeting were representatives of the commercial forest industries operating in the park, and civil servants representing the Department of Lands and Forests. Absent from the meeting - although invitations were extended - were political representatives from the Government of Ontario.

The letter containing the above resolution was sent to Premier Robarts on October 5. No acknowledgement of its receipt has ever been transmitted to the League or any other representative organization from the Premier's office, as far as can be determined.

On November 12, 1970, Honourable Rene Brunelle, Minister of Lands and Forests, made a statement in the Ontario Legislature. He stated in part:

"We have been urged to reclassify Quetico Park from a natural environment park to a primitive park. While the natural environment classification provides for a wide variety of outdoor recreational opportunities to meet the needs of many interest groups, the present primitive classification imposes very stringent use restrictions which cater to a much narrower range of interests - basically to those interested in wilderness.

"Such a reclassification would mean, for instance, that the existing organized campground at French Lake would have to be phased out; no roads would be permitted anywhere within the park for any purpose, and outboard motors would be completely banned. In addition, of course, no resource extraction would be permitted. We do not feel that it is in the total public interest to take this action at this time, bearing in mind that approximately 50 per cent of the park is now, and has been for many years, set aside for wilderness use.

"We have been urged to block the proposed sale by Domtar of its interests in the Jim Mathieu Lumber Company to Ontario-Minnesota. Mr. Speaker, Ontario-Minnesota is a good corporate citizen of long standing in the Ontario town of Fort Frances, employing more than 1,000 persons. It will need the pulpwood and chips from the Jim Mathieu licence and sawmill at Sapawe for its \$53 million expansion in Fort Frances. And it can provide sawlogs from its licences for the Sapawe mill employing 225 men.

"Thus there is sense to the sale. To be clear about this, keep in mind that only a portion of the Jim Mathieu licence occurs in the park.

"This government has earnestly sought expansion of the woods industry which accounts for more than 70 per cent of employment in northwestern Ontario. I should point out that we have a responsibility to Ontario-Minnesota to meet the wood requirements of their expanded facilities.

"Finally, Mr. Speaker, I want to emphasize that we are aware of the great recreational value of Quetico Provincial Park and we intend to preserve it."

It is within this political framework that the Algonquin Wildlands League approaches the Advisory Committee with this submission. We are convinced that government policy on the management of Quetico Provincial Park is wrong - just as we are convinced it is wrong in relation to the other major provincial parks where commercial logging operations are permitted - and that the existing policy must be changed.

If the appointment of the Advisory Committee on Quetico Park and the holding of these public hearings is the first step by the government in a policy shift then the Algonquin Wildlands League welcomes the move.

Already, we have seen one heartening sign. On January 15, 1971, Mr. Brunelle, acting on the advice of this Advisory Committee, announced that the government was excluding a 400-square mile area in the northwest corner of Quetico Park from the previously contracted Volume Agreement held by Ontario-Minnesota Paper Company.

It is worth noting the wording of the statement as reported in the January, 1971 Departmental newsletter:

"The recent action was recommended by the Advisory Committee and supported by a study by Lands and Forests staff of the present and projected wood requirements for the Fort Frances and Kenora plants of the Ontario-Minnesota Paper Company which is launching a \$51 million expansion program in Fort Frances.

"The study found that the company has available to it sufficient wood without requiring any from the area presently held under Volume Agreement in the northwest section of the park. Accordingly, the boundaries of the Volume Agreement area will now be revised to exclude that portion previously held in Quetico Park.

"As good corporate citizens of an industry which accounts for most of the employment in northwestern Ontario, Ontario-Minnesota Paper Company has provided us with every cooperation in accepting this decision."

So it would appear that the needs of November, as outlined by Mr. Brunelle in the Legislature were not so pressing in January. This only serves to strengthen our position in calling government policy into question. By this sudden degree of flexibility, according to Mr. Brunelle's announcement, 70 per cent of Quetico's 1,750 square mile area is now removed from commercial logging. That leaves 30 per cent of the area available for commercial logging. We are before this Advisory Committee to save this 30 per cent from further exploitation.

Of the five major provincial parks in which commercial logging is permitted - Quetico, Algonquin, Lake Superior, Lake Missinaibi and Killarney - Quetico represents to the Ontario conservation movement the greatest challenge, the greatest hope for the survival of a true wilderness area. It has become the movement's "holy ground" to be saved from desecration by the forest industry.

Having seen what government policy has caused to be done to Algonquin Park where 23 logging companies have acquired virtually all of the park for commercial exploitation, the Quetico fighters are determined to remove the foot in the park door, as represented by Ontario-Minnesota Pulp and Paper Company and Domtar Limited, owners of the Jim Mathieu Lumber Company.

Let us begin by putting the Ontario forest industry in a new perspective. The Algonquin Wildlands League readily acknowledges the importance of the industry to the economy of the province. No matter what set of statistics one might use as reference - production, employment, wages, etc. - it all adds up to a sizeable contribution.

Northern Ontario accounts for 90 per cent of the province's merchantable timber and for 86 per cent of the pulp and 65 per cent of the lumber production. The forest industry is a mainstay of the northern economy. Some 69 per cent of manufacturing jobs in the northwest are wood-oriented. In the northeast the figure is 31 per cent.*

But there are other interesting figures to consider. According to the Department of Lands and Forests there are 181,097 square miles of exploitable forest area in northern Ontario, of which 168,597 square miles are Crown owned and 12,500 square miles are privately owned.

Within the 168,597 square miles of Crown-owned land lie our major provincial parks - the aforementioned Quetico, Killarney, Lake Superior, Algonquin and Lake Missinaibi. Together, these five parks occupy 5,502 square miles, or approximately three per cent of the total exploitable forest area. Quetico Park, at 1,750 square miles, represents less than one per cent of the total exploitable area.

*The Ontario Forest Industry, Its Direct and Indirect Contribution to the Economy, Department of Lands and Forests, 1969

The growth and influence of the forest industry in northern Ontario is graphically illustrated in the report of the Ontario Economic Council ("A Forest Policy for Ontario, February, 1970"). Between 1932 and 1965 the timber licence holdings of eleven paper companies - Abitibi, Dryden, Great Lakes, Spruce Falls, Ontario-Minnesota, Marathon, K.V.P., Kimberly-Clark, E.B. Eddy, Ontario and Domtar - grew from approximately 26,000 square miles to approximately 98,000 square miles.

Such is the forest industry's control over the northern Ontario exploitable forest area - an area, by official definition, that includes the five major provincial parks. Indeed, it was quite apparent on that famous October 3 meeting in Quetico that the Timber Branch of the Department of Lands and Forests and the forest industry completely disregard park boundaries when looking at the forest potential for their operations.

And so we are appearing before the Advisory Committee to argue for the preservation of 30 per cent (that is, the remaining area of Quetico Park open to commercial logging) of less than one per cent of the total exploitable forest area of northern Ontario. So much time, energy and money spent on such a miniscule area - a mere dot on the map of Ontario. Yet it has become the crucible for the conservation movement in this province.

The Government of Ontario, by persisting in its slavish adherence to a policy of multiple-use of resources in Quetico and the other major provincial parks, has caused a remarkable fusing of people from all parts of the province and beyond in this cause to save a great wilderness heritage.

We submit that the Advisory Committee's own recommendation excluding the 400-square mile area of Quetico from Ontario-Minnesota's Volume Agreement brings into question the argument of the government and of industry that the local economy depends heavily on the implementation of the multiple-use policy in the park.

We must ask the question: what effect has this move had on the local economy? And we must further ask, what effect would the removal of all commercial logging from Quetico Park have on the local economy?

We ask this in the light of developments in the forest industry as a whole. According to the Ontario Economic Council the development of mechanization in the Ontario forest industry has progressed at a faster pace than any other area east of the Rocky Mountains. Reported the Council:

"It has already been predicted that owing to mechanization Ontario's woods work force would decline from its peak at 25,464 workers in 1949 and stabilize at about 6,000 in the mid-1970s. In 1966 the total number of production and related workers stood at 9,794.

"To emphasize this declining requirement for woods production workers, the representatives of one major Ontario company, currently employing some 2,300 men to produce 500,000 cords of pulpwood annually, has predicted that the same volume of wood will be produced by approximately 415 men when full use is made of mechanized equipment now coming into production."*

We invite the Advisory Committee to consider these developments in relation to the future operations of Ontario-Minnesota and Dometar Limited in and around Quetico Park. How necessary to the future of the Ontario forest industry as a whole, and the operations of these two companies which are among the "Big Eleven" licence holders of the province, is this area of 30 per cent of less than one per cent of the exploitable forest area of northern Ontario?

What is the future responsibility of an industry which accounts for 69 per cent of employment in northwestern Ontario and who, according to the Economic Council, is planning to reduce its work force by 75 per cent by the mid-1970s?

*A Forest Policy for Ontario, February 1970

What of the thousands of workers to be thrown out of work by industry's drive towards mechanization? K.K. Nielsen, as vice-president of the woodlands section of the Canadian Pulp and Paper Association, in an interview in the Globe and Mail of March 19, 1969, left the impression it was the responsibility of government, not industry. In the next few years, he said "the number of jobs will be cut by between 50 and 70 per cent and all levels of government will have to plan for the social changes in the labor force."

Industry's attitude was even more graphically outlined by Murray D. Seeley, retiring president of the Ontario Forest Industries Association, in his annual report delivered January 19, 1971. According to Mr. Seeley, as reported in the Globe and Mail, current public concern with the environment "has unleashed unreasonable action, not only against commercial logging but against almost all forms of forest management."

He went on:

"The numbers of 'ultra conservationists' are increasing rapidly. They are a well-organized, articulate and vocal group and appear to have almost unlimited financial resources. (The Algonquin Wildlands League would happily and readily exchange its financial resources with those of the Ontario Forest Industries Association) These ultra-conservationists would lock up vast forest areas of forest land for single-purpose use and herein lies a basic and potential danger which must not be overlooked by our industry. The full impact of these pressures on the well-being of our industry are difficult to assess; however, we can expect that as the demand for recreation develops, more park areas will be added to the present system and the total land available for commercial logging will be reduced.

"Logging operations on all Crown lands will be even more regulated and we will be faced with ever-increasing and unreasonable restrictions, such as those proposed for Algonquin Park, all of which will adversely affect our wood costs and the efficient use of highly mechanized logging systems."

It must be clear to the Advisory Committee that the forest industry today is less concerned about the future of its individual workers than it is about its own profitability. We submit it would be in the Committee's best interests to examine closely the human factor in the forest industry's argument. If there are to be large-scale layoffs in the forest industry in northwestern Ontario, what is the government doing to prepare for this event? Is the continuance of commercial logging in Quetico Park equated more to profitability than to jobs? If so, then the defence of multiple-use of resources in the provincial parks of Ontario takes on a new complexion.

As to Mr. Seeley's claim that the so-called "ultra-conservationists" would lock up vast forest areas of forest land for single-purpose use, we remind the Committee again that in the case of Quetico we are talking about only less than one per cent of the total exploitable forest area of the province, or, in the case of the five major parks where commercial logging is permitted, three per cent of the total exploitable forest area. And we remind the Committee that we are talking about areas in public parks, not those tens of thousands of square miles of forest area either owned outright or under licence by the forest industry itself.

There is one more point that we might interject into this discussion. In his November 12 statement, Mr. Brunelle took pains to point out that 95 per cent of Quetico Park users are Americans. We do not deny this fact, nor would residents of Florida or the Caribbean islands deny the fact that Canadians are well represented in their areas during the winter months. Not many Canadians from eastern provinces get to visit Banff or Jasper National Parks in Alberta, but they are quite willing to support their existence in the assurance that a great wilderness heritage is being protected. The same applies to residents of southern Ontario who have yet to visit Quetico Park.

Former Premier Robarts, writing in the Canadian High News, in October, 1969, had this to say:

"Good earth, good air, good water and the life and beauty that depends upon them - inside the cities and outside the cities - this is the natural environment which man cannot create but which he can spoil and even destroy. It will be for the Canadians of the 70s to decide whether they will hand on to the next generation a better natural environment than was left to this generation. This is not only a great task but it is also a great trust, for no other achievements can make up for serious damage to the basis of life itself. And to do so will cost everyone money through higher prices and taxes, reducing what they can spend for themselves on other things. It is here that the crunch will come."

If it was not obvious to Mr. Robarts and his colleagues then, it should be to the new leadership that in getting down to the crunch the Ontario forest industry is going to have to give, just as the taxpayer must, if we are serious about preserving our natural environment. The wilderness areas of Ontario - these "holy grounds" of our natural environment - must be protected no matter what the cost. What is less than one per cent of the total exploitable forest resource of northern Ontario in dollars and cents? Or three per cent?

The Algonquin Wildlands League submits that the removal of commercial logging as it is now practiced in Quetico and the other four major provincial parks is worth the price. That is why we respectfully request that Quetico Park be re-classified under the Classification of Provincial Parks in Ontario as a Primitive Park, to be held in trust for the people of Ontario and Canada as a whole as a precious natural legacy.

Once such re-classification is undertaken we would then urge the government of Ontario to see that this legacy is respected by those who would wish to make use of it. Entry into a Primitive Park should be regarded as a privilege, not a right. This will require a tremendous education program, and perhaps , in the initial stages, a strenuous policing of the wilderness. But we believe it is worth the cost.

We therefore urge the Advisory Committee to extend its vision beyond the immediate, local self-interests to the much broader horizons. The preservation of Quetico Park as a wilderness area representative of the Ontario heritage is a tremendous challenge to the new administration of this province. The Algonquin Wildlands League will give its strongest support to any such move.

The declaration of a complete moratorium on commercial logging and road construction in Quetico Park NOW, while this committee is deliberating the question, would be a good beginning.

Respectfully submitted

C. Abbott Conway,
President

BRIEF
to
THE QUETICO ADVISORY COMMITTEE

by
Richard Martin, 19 Machar Ave., Thunder Bay N
1 March 1971

In 1787 Joseph Brant invited one of my European ancestors to settle in Southern Ontario with him. It is now almost 200 years since my ancestor first saw the forested valley of the Grand River and began to improve it. As a result of this improvement it is no longer possible to catch a speckled trout in the Grand River, which is why I don't live in that part of Ontario any more. This moving from one despoiled part of a continent to seek more pleasant surroundings in another was probably what led my ancestors from the valley of the Mohawk to that of the Grand; probably the presence of my detergent refuse and car exhaust will have the same effect on Thunder Bay's environment that my ancestors energetic deforestation had on that of Southern Ontario. Looking back over 200 years, I cannot help but contrast the rich and varied natural environment my ancestors were given with what I have been left with; I wince at the thought of what my generation will leave to those now in their cradles.

Every government of this land since 1787 has recognized its obligation to restrain certain aspects of the behaviour of some of its citizens in order to prevent harm to others. Governments restrain the greed of those who would commit armed robbery so that the rest of us can go about our business without being wrongfully deprived of what is rightfully ours. Evidently, however, no government since 1787 has recognized its obligation to restrain the greed of one generation so that subsequent ones may come into the world without being wrongfully deprived of what is rightfully theirs.

As the sad experience of Southern Ontario has amply demonstrated, once a natural area is gone or changed, it is gone or changed forever. I am deprived of my Southern Ontario hardwood forest and trout streams because 200 years ago no one thought it necessary to preserve them. On the question of preservation of natural areas then, if only as small samples of what we might have enjoyed, any thought of compromise is delusion. Either a natural area is preserved or it is not. The time is long overdue for our government to stop making these deceptive "compromises" between the active promotion of this generations' need/greed and the lip service it pays to the rights of future generations. In addition to the failure to acquire private land for parks at the rate promised in 1962 (10 million dollars per year), the most recent examples of this type of phoney compromise have been the boundary adjustment at Polar Bear Park to favour mining interests and the failure to designate Quetico as a Primitive Park to favour the forest industry interests. I can no longer accept that the minority interests of investors in and employees of the forest and mining industries override the majority interests of park users in this and future generations.

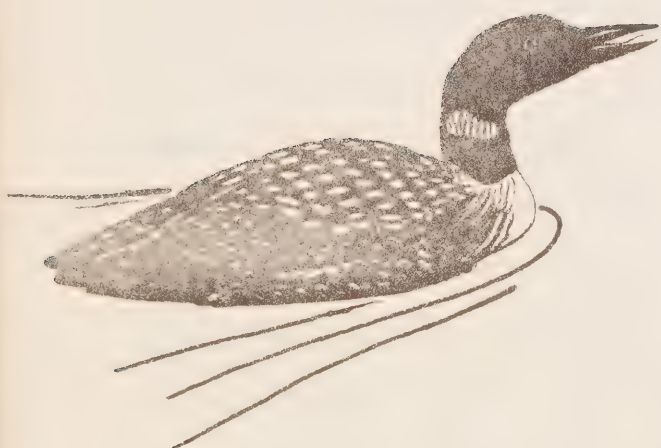
At this point in time, the Ontario government has the opportunity to demonstrate one of two things: either it recognizes its obligation to the future or it admits that it never has had and does not intend to assume such an obligation. What I want is a concrete demonstration NOW that my government will not permit this generation to leave its descendants garbage heaps for land, open sewers for rivers and cesspools for lakes. I choose to find this demonstration in the immediate designation of Quetico as a Primitive Park.

I am asking only a minute, halting first step in the direction of a sane attitude to my land. Brant's people used their land for tens of thousands of years with far less destruction than I and my ancestors have achieved in a mere two centuries. If this first step is not taken, my suspicion that Brant's people are far better stewards of this land than I or my ancestors *are* will be confirmed. So, should the Ontario government fail to recognize its obligation to enforce provision for future generations, it will have forfeited my obligation to act as a citizen of a civilized state.

Richard Martin

B R I E F

QUETICO - A MATTER OF VALUES



Donald Foxall,
R.R. #1,
Wyebridge, Ontario.

March 3, 1971.

QUETICO BRIEF

Donald Foxall,
March 3, 1971.

Gentlemen: although I am not in the habit of trying to sway others in their decisions, I feel that with so much at stake I must express my opinions.

I was once involved in forestry work (scaling, etc.), then arborculture, and now I am a wildlife artist-naturalist. I feel that this has given me some insight into both outlooks.

To my mind, there are many reasons for limiting as much as possible man's influence in a wilderness area such as Quetico. In essence, it is a matter of values: will we be swayed by immediate monetary values, or do we have the wisdom to recognize and preserve the real values inherent in wilderness - values that can be so easily destroyed and never replaced?

Scientific Values

With our exploding population and expanding technology, man's influence is everywhere. This is resulting in many adverse effects on our environment - effects which we are just barely becoming aware of, much less understand. As we blunder along we are disrupting and destroying many complex ecosystems which are in effect arteries in our own life support system. If we continue in our ignorance to rupture these arteries, the whole system may collapse. If we are to survive, we must preserve natural areas that will provide us with comparative studies of relatively undisturbed ecosystems and, hopefully, some insight into how we can reverse some of the

havoc we have created. Thoreau once said: "In wilderness is the salvation of mankind". Perhaps that could be changed to: "In wilderness is the survival of mankind". Scientists around the world are convinced that the key to our survival lies in the study of ecosystems in relatively undisturbed situations.

Sociological Values

The effects of people on people are becoming increasingly apparent in our major cities. Continued pressure and exposure to each other causes man to become callous, indifferent, often unstable, and sometimes violent. These problems can only become worse as the world's population grows and even doubles within the next 30 years. The only way many people can cope with these pressures is to escape for a short period of time to regain their sanity. Our parks are over-taxed now, and in the future they will have to serve many more people. We will have to preserve as much of the wilderness quality as possible to meet the demands of the future. Logging can do nothing but destroy some of this quality.

Employment

By their own admission, the forest industry is being automated at a tremendous rate, and a few highly skilled workers are replacing many relatively unskilled men. In fact, the number of jobs will be cut by 50 - 70% according to

Mr. K. K. Nielson of Canadian Pulp and Paper Association. It soon becomes apparent that the company is the only real winner here and that an economy founded on logging is doomed from the outset. Much more lasting ways to bolster the economy of northwestern Ontario must be found. If Quetico is sacrificed for this cause, the people of Ontario and Canada will be the losers. Such a move cannot be justified.

Park Management

Traditionally in Ontario the forestry people have had the greatest influence in decisions made by the Department of Lands and Forests. This attitude was understandable in the past as trees meant dollars, but in these enlightened times we surely have the ability to see beyond the dollar sign. The value of Quetico's trees cannot be measured only in board feet or units of pulp. As much as it may astound the old time forester, there is a need and a place for white birch, aspen, and in the foresters parlance other "undesirables".

I have witnessed government employed people setting fire to white birch trees because the birch were taking up space better occupied by "valuable" trees. We cannot allow people with this sort of narrow vision to dictate policies in our parks. Parks should be operated by people who are concerned with the total ecology of the area. If it should be decided that a park area has to be logged, this should not be done by loggers who are governed by profit motives or the foresters

whose visions of bliss are straight, even rows of trees devoid of blemish or insect pest. Such plantations are in fact biological deserts. Rather, forest management in parks should be carried out by people concerned with factors other than monetary gains.

In review of these statements it would appear that I am completely biased against the logging industry. This is not the case. I believe the industry to be valuable and important, and to have a definite place, but I contend that place is not in our parks. Contrary to what the industry representatives would have us believe, logging will not die if Quetico is closed. If, however, the park is left open for cutting, the wilderness quality of Quetico will be as dead as Algonquin.

Aesthetic and Cultural Values

Algonquin once possessed this wilderness quality; but, in our ignorance and complacent way, we allowed it to be destroyed. The water, rocks, and even most of the trees are still there but that elusive quality that is wilderness has been lost forever...lost to the sights and sounds of power saws, logging trucks, and access roads across rivers and portages. It may be argued that Algonquin was doomed anyway because of its proximity to heavily populated centres, but this only points out our short-sightedness in not setting aside more and larger areas in the southern part of the province. We dare not make the same mistakes in the north.

QUETICO

Page 5

We must classify Quetico as a primitive park, and work towards establishing more wilderness areas. The Canadian shield has had a profound effect on our culture, as shown by the works of our prominent artists and writers. In fact, the shield has played an important role in making us what we are. This alone should be reason enough to "preserve" a small piece of our heritage.

On the question of Quetico, there can be but one answer...

L E T I T B E

A Brief to the Quetico Park Advisory Committee

Quetico Provincial Park is an area of unusual ecological terrain. The timber wolf and bald eagle both are dependent upon it. The beauty of the small lakes and easily traversed portages make it an ideal area for canoe tripping. It has the heaviest concentration of Indian rock paintings in North America. These are some of the reasons why the government should classify it as a Primitive Park. It would then remain as it has been for hundreds of years. Psychologically man needs to know that there is some wilderness which he can go to. He may not go, but the knowledge that it is there and some go, gives him a sense of security that he needs.

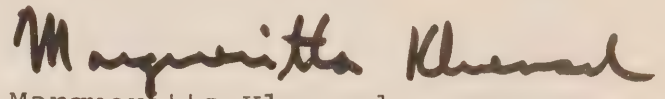
A summit meeting of concerned conservationists was organized by the Algonquin Wildlands League. One of the interesting things learned at the meeting was the fact that the taxpayers in Ontario are paying for the privilege of cutting down the trees in Quetico Park. It costs the government more to pay for the partial reforestation and management of the cut area than they get as income from the trees cut. This indicates that the employment from the forestry industry is not sufficient to warrant the continued cutting in the area.

More local residents would be employed if the tourist attractions of the park were made known. The possibilities for canoe trips and camping are unique. Good publicity and outfitting would bring in many people and this industry would boom.

The devastation caused by the logging industry is irreparable. It is wrong to let it continue. The shallow top soil and short growing period make it a very slow-recovery area. The Park should be classed as a Primitive Park. It would then be protected from all mechanical vehicles, except for emergencies.

Quetico Provincial Park has a real place in Canadian history. It should be kept as it was in the days of the early explorers who were searching for the fabled Northwest Passage.

This was the route of the Voyageurs and it should be kept as it was when they travelled in their birch-bark canoes under the lovely pines.

A handwritten signature in dark ink, reading "Margueritta Kluensch". The script is cursive and fluid, with the first name being more prominent than the last.

Margueritta Kluensch
Associate Professor
McArthur College
Queen's University

Northern Lakes

GIRL SCOUT COUNCIL, INC.

2031 Second Avenue East, Hibbing, Minnesota 55746



March 4, 1971

Mr. R. T. Thomson
 Secretary
 Quetico Advisory Committee
 Ont. Dept. Lands & Forests
 Fort Frances, Ontario

Dear sir:

This letter is a brief. This brief is my opinion based on ten years of traveling the waterways of the Quetico. It has become as dear to me as it is to you. This is why I'm expressing my opinion.

1. I have no objection to controlled logging or therapeutic logging in the Park. This decision should be placed with knowledgeable people in the forestry department. They are better able to judge the importance or lack of importance of such a move. I do, however, know that the true natural beauty of the park including the silence broken only by native sounds of animals, birds, wind and water is important to retain.

I still recall my disappointment, after paddling to McKenzie Lake, to hear the racing motors of trucks and buzz of saws coming in from the north. The wilderness spell was spoiled a little.

Roads in Quetico would in my opinion be a disaster. Evidence of logging days are to be found in the Bent Pine area. They hold a lure for canoeists because they show results of that period and bring home the hard facts of how timber can be completely harvested so that pines dominate the scene with only a big pine here and there. Perhaps with controlled cutting and replanting this would not be the case today; but do we need more Bent Pine areas? The forestry people should know the answer to this.

2. A canoe and paddle is a part of the Quetico. Here again I am of the opinion that outboard motors could be allowed on parts of the Park. Basswood, as far as Russell, Sturgeon Narrows, Sturgeon and the Maligne seem logical for motor permits. Motors should be limited only to these large water areas, but definitely banned for all off the artery lakes. Motor size should be considered very carefully. I would not use a motor beyond Basswood. They should be permitted for rescue or emergency trips by authorized personnel in the rest of the Park.

3. The snowmobile is a new means of transportation. They should be permitted only on designated snowmobile trails. This would require enforcement in some way to prevent littering and kind of fuel supply permitted. Penetration deep into the park could create great problems especially in destruction of the natural wilderness.



4. I feel that trapping should not be permitted. The animals of the Quetico are needed. If beaver are taken, what happens to our beaver dams which control our water levels. We would soon have no access to the isolated small lakes which are so beautiful because few men have been there. These are the places where our young people under proper leadership are able to find, many for the first time, what nature -- its quietness, beauty, and nearness -- can do for a person. We need to preserve these areas for us and our youth. Trapping can be done elsewhere.

5. Aerial spraying and pesticides must be administered or not as the experts in this field find is needed. If spruce budworm or white pine rust or any other disease needs man control, the forestry people are best qualified to decide the best method to use.

I have been taking Northern Lakes Girl Scouts into the Quetico for ten years as a volunteer. I love the Park and have been able to give this love to many girls by showing them how to live in the beautiful wilderness and still leave it as wild, clean, and beautiful as before we came.

6. I also feel that if anything should be banned from the park besides cans, it is liquor. We have met groups of young and old people who endanger their own lives and those of others by not having control of the senses needed to safely travel these waterways. Liquor is available any time at home or in resort areas, but can easily be done without on the trail. Would some ruling be possible in this area?

I only hope that customs fees do not become so great for our strictly controlled groups that we can no longer afford to enjoy this much needed experience. Could special fees be set up for groups such as ours? Perhaps after being checked out on the way we operate (this has been done for our group), a special rate could be established. I'm speaking especially about the \$6 fee per canoe per trip. Could a flat reduced fee be charged per season based on total days in the park?

Volunteer Director
Northern Lakes Girl Scout Council
Senior Girl Scout Canoe Trips
2031 Second Avenue East
Hibbing, Minnesota 55746

Mrs. Dorothy Harry

THE CASE FOR WILDERNESS STATUS FOR QUETICO PROVINCIAL PARK

A brief submitted by the NATURAL HISTORY SOCIETY of Minnesota to -

MR. R.T. THOMSON, Secretary of the Quetico Advisory Committee,

ONTARIO DEPARTMENT OF LANDS & FORESTS, Fort Francis, Ontario. . .

By Dr. Clayton G. Rudd, President and Editor of NATURALIST Magazine.

We would like to make a short statement reflecting our interest in Wilderness as a part of our own natural environment. We are as fellow North Americans keenly aware of the inroads civilization and development have made upon our shrinking wild areas. That encroachment is probably more evident upon our own side of the border and the change is most apparent in the last twenty years. Many Conservationists and Wilderness advocates are thinking not only in terms of recreation. We are thinking of the broad spectrum of values involved. Our concern encompasses watersheds, clean air, clean water - in fact our total environment. We are working for a quality environment which includes open space in urban areas but looking to Ecological Research, Water Quality Research, Visitor Use and Impact Research, and allied research such as Wildlife Habitat Research, Endangered Species Research and others to perpetuate the Wild Quality of Wilderness Areas. We look upon Natural Forests and Wild Lands with their associated Wildlife as reservoirs of Genetic Materials worthy of Scientific Study and perpetuation as Natural Museums necessary to the quality of human life, now and in the future. We know that our own Boundary Waters Canoe Area and your Quetico Provincial Park form a unique scenic resource - a rare and rich area unique in all the world. . .

We are involved in preventing mining in the Boundary Waters Canoe Area. We are involved in a crusade to stop all logging in the BWCA. We are supporting all the associated research by Federal and State agencies to bring us knowledge of the past history of forests and plant communities in

the BWCA. With the Ecological Research in progress for the past three years we hope to perpetuate and restore - where necessary - the wild qualities of the BWCA by natural means - not logging.

We are in favor and committed to the practise of Good Timber Management in National Forests outside Wilderness areas.

We believe in Research and Management working together for desirable goals in the Perpetuation of Wilderness Qualities.

We believe that there is enough forested area - outside our Wilderness Preservation System - if managed wisely - to supply timber needs for the foreseeable future without logging our Boundary Waters Canoe Area.

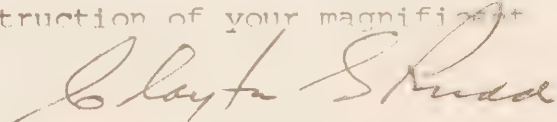
We hope that in your Province of Ontario there are enough Timber Reserves outside the QUETICO PROVINCIAL PARK to fill your needs for timber and pulp requirements for an expanding economy far into the future. Why? Because your magnificent Quetico is an adjunct of great importance as a scenic resource and Wilderness area to our own BWCA. Together they form an incomparable maze of lakes and streams, of superb forests and forest communities, of rocky shorelines and interesting terrain in a magnificent and irreplaceable resource.

We will gladly share them with you!

We have worked for half a century to keep most of our BWCA a Wilderness and perpetuate its wild qualities.

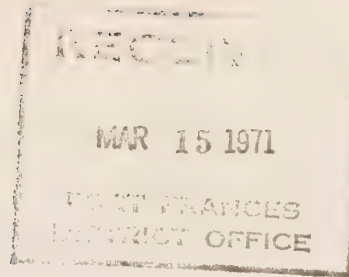
We hope that we may work together in common cause for an uncommon commodity- Wilderness. . .

May I state that we look toward your Province with envy that so much of QUETICO is Wilderness and hope that in your wisdom and foresight you may prevent further logging and further destruction of your magnificent resource.



Research and management face a new future in WILDERNESS PERPETUATION. We envision the day when when there are active management programs to perpetuate the NATURAL ECOSYSTEMS as goals of wilderness management.

Mr. R.T. Thompson
Secretary,
Quetico Advisory Committee,
Department of Lands & Forests,
Fort Francis, Ontario



Dear Sir:

The following is a Brief presented by the Woodstock Oxford
Rovers Chapter of National Campers & Hikers Association.

As we see the facts our government is betraying its
trust to the Canadian People by allowing the Logging ind-
ustry to get a foothold in Quetico Park.

Another great Canadian Heritage will soon be nothing but
barren hills and valleys left to erosion of the elements.

When Quetico Park was established as a public park and
forest reserve and fish and game preserve for the benefit
and enjoyment of the people of Ontario, we feel sure that
it was never expected to see the almost uncontrolled des-
truction that we see today.

Our Government has advertized Quetico as one of the last
great primitive areas on the continent and the largest
accessable wilderness canoe area in North America.

Our Governments memory must be very short when they
consider allowing more cutting operations.

We say cancel the licenses of Domtar and similar comp-
anies before it is too late.

Also we feel that there should be no more mining operations allowed by any one, much less by our American neighbours who seem to be holding the largest percentage of the mining claims.

This could only lead to the further destruction of Quetico Park.

Let it be known that we, members of the largest camping organization in North America, that we feel Quetico Park is one of the last wilderness strongholds we have, so let us keep it that way.

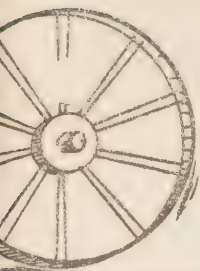
Ban all further logging operations in Quetico Park and prevent any mining operations from getting a stronghold.

KEEP QUETICO NATURAL

Robin J. Hood
T. Foray
John F. ...
Jack Doyle
Murray Walker
Pete ...
A. ...
Gerald Matta

Jack Boden
Betty Kila
Dolly Walker
Harvey Butt
Frances Butt
Evel Boden
Marlene Matta
Gladys Matta

Leane Campbell.
Carol Campbell
Richard Phillips
Elizabeth Phillips



THE
BIDE AWA'S
WHEEL SPINNERS

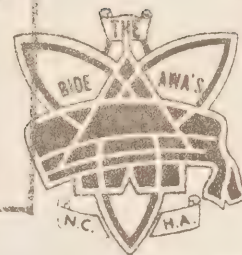
National Camper's and Hiker's Association

(A Rolling Stone Gathers No Moss but N.C.H.A. Gathers Many Friends)

RECEIVED

MAR 15 1971

FORT FRANCIS
DISTRICT OFFICE



Brief presented by the Bide AWA'S Chapter of N.C.H.A. in Ontario to the Quetico Park Advisory Committee.

Mr. R. T. Thomson,
Secretary of Quetico Advisory Committee,
Department of Lands & Forest,
Fort Francis, Ont.

Feb. 26, 1971.

Dear Sir:

It has been brought to the attention of the members of the above chapter that lumbering has been started in Quetico Park which we are very much against.

We are led to understand that this is one of the last great primitive areas on the continent and the largest accessible wilderness canoe areas in North America and we believe the natural environment of this park should not be spoiled by commercial logging operations.

Domtar Corporation hold logging rights on 468 square miles, there is also 400 square miles held by Ontario and Minnesota Pulp and Paper Co. (Owned by U.S. Boise Cascade Co.) which is negotiating to buy the Domtar operation. This would give the Boise Cascade Co. cutting rights on over 868 square miles which is almost half the 1750 square miles of Quetico Park. To our mind this massive area of operation would certainly have a disastrous effect on the animal and fish life by the seepage of machine wastes into the waters and the entire elimination of the natural shelter and feeding grounds of the animals. It destroys half of one of the last great primitive areas on the continent as advertised by the Ontario Government.

This area should be kept as a public park, forest reserve, fish and game preserve, health resort and fishing ground as was the intent when Quetico Provincial Park was originally established in 1913, for the enjoyment of all and not as a profit making operation for one or two large corporations. This could be done by the Ontario Government taking back Domtar's licence and also by reclassifying Quetico Provincial Park as a Primitive Park.

Trusting the Ontario Government will come to the rescue of one of our last Primitive Parks.

Yours Truly,

Ed Rivers

Ed. Rivers, Conservation Officer,
The Bide AWA'S Chapter of N.C.H.A.,
1 Lyon Heights Rd.,
Scarborough, Ont.

February 24, 1971

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Mr. R. T. Thompson
Secretary, Quetico Advisory Committee
Ontario Department of Lands and Forests
Fort Frances, Ontario

Dear Mr. Thompson:

I should like to submit a brief to the Quetico Advisory Committee regarding plans for the future of Quetico Park. While I am aware that the committee is more interested in "hard facts" than in "emotional" requests to preserve the Park as a primitive resource, I find it difficult to present statistics and facts on the aesthetic and humane reasons for protecting the park from economic exploitation. No one would deny the benefits derived from a museum, from orchestras, ballet, the theatre and art, but these would be as difficult to justify economically as a primitive natural museum. Our cultural centres would be impossible to achieve without the support and enthusiasm of the business community. May I suggest that in a different but equally important way the primeval forest, the untouched forest is as worthy of support, of preservation, of mere existence, as are our museums and our centres for the arts.

We are unique among creatures in our ability to perceive beauty and to appreciate intangibles. Ants, for example, are highly organized, can utilize raw materials to fill their needs, and exploit their environment for this purpose. Even the most hard-headed businessman among us must grant that our needs transcend the purely physical. It is to satisfy these needs, call them spiritual or aesthetic, that we must preserve a few places on this planet for men to retreat to from the "concrete jungle." Canada is blessed with having a few such places left. Let us learn from the greed and mistakes of others not to "sell our birthright for a mess of pottage."

Quetico offers what is becoming increasingly rare: a piece of this planet which has not been altered by man for profit or "progress." Perhaps in the short run it would be more profitable for a few if the park were logged in part, however, in the long run Canadians would lose the opportunity to see and enjoy a virgin tract of land, not crisscrossed by roads, chopped up for timber, noisy with the sound of machinery.

Sincerely yours,

Sarah Bennett

Sarah Bennett

231 Rosemary Lane
Incaston, Ont

1971

Feb. 26, 1971

Mr. R. T. Thomson,
Secretary,
Quetico Advisory Committee,
Dept. of Lands and Forests,
Fort Frances, Ont.

Dear Sir:

We are a family who have always loved camping and nature and we wish to protest the logging in Quetico Park, one of our last wilderness areas. In the Canadian Audubon magazine it states that 468 square miles within the park are now being cut by a logging company and another agreement has been concluded for another 400 square miles to be cut, nearly half the total area of the park.

Quetico was set aside as a wilderness park, as the order-in-council puts it "for the benefit, advantage and enjoyment of all people" - "as a cultural treasure". This park is being treated almost exactly the same as forested lands outside of the park boundary. It is being managed largely for the benefit of the forest industry companies. A publication of the Ont. Dept. of Lands and Forests says "it is regarded as a wilderness park to be preserved from any development which might destroy the wilderness environment". We feel that there is no place in a wilderness park for mechanized commercial logging. We do not know if clear-cutting is allowed in the park or not but would like to see this type of logging banned in the Canadian forest industry. Other countries have learned this after destruction and denudation of forests, after it is too late. In man's greed for money and things he has destroyed much of the beautiful earth.

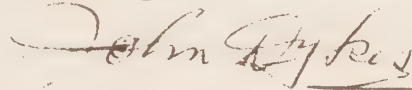
The logging companies may say that good harvesting methods can be beneficial to forest and wildlife, that harvesting trees as they mature here and there through the woods is valuable to wildlife - but to look at it from an ecological point of view - even when the best logging practices are followed we are upsetting the balance of nature, and when man destroys the ^{natural} ecological balance as he has done everywhere he has gone, he suffers the consequences.

We have been told that the forest will be more healthy if they cut all dead standing trees, but woodpeckers for example, need dead standing trees in order to propagate and the ivory bill in the States has become almost extinct because the forests have been destroyed. Also some small animals require old growth virgin forest conditions in which to live. Quetico has been a sanctuary for endangered species, such as the bald eagle and the timber wolf.

The forest floor is really a factory for making soil, for absorbing and holding rainfall. It is fertilized by animal and plant detrius, but before this litter can be used it has to be broken down and this is done by being eaten and re-eaten in a definite order, a long complicated process requiring steps by many different organisms, earthworms, insects, fungi, bacteria, etc. Logging machines do damage to this forest floor. Experts know that man should get in harmony with the ways of nature but greed and selfishness and desire for fast profits and our gluttonous need for paper are destroying our forests. Surely there are enough forests for the hungry logging industry

without using a valuable wilderness park. Surely something should be kept in a natural state for future generations. Already there are four bridges over canoe routes and another one planned. We feel that logging roads and bridges have no place in a wilderness park.

It is within the power of the Ontario Govt. to stop the destruction of beautiful Quetico Park by refusing to transfer the license to the Ontario-Minnesota Pulp and Paper Co. Please keep it a real wilderness park.



Mr. and Mrs. John Dykes and family

546 Oakdale Dr.

Winnipeg 20, Man.

Macalester College
St. Paul, Minn.
February 23, 1971

R.T. Thomson
Secretary
Quetico Advisory Committee
Ontario Dept. Lands and Forests
Fort Frances, Ontario

Dear Sirs:

It has come to my attention, recently, that the Quetico Advisory Committee has been considering a change or modification of the management policy of Quetico Provincial Park. Having canoed extensively in both the Quetico and Boundary Waters Canoe Area wilderness areas as a guide for YMCA Camp Menogyn, I would consider myself, at the very least, spiritually qualified or committed to state my own views concerning the management of Quetico Park.

Initially, and up to the present, I believe the Quetico management policy was one of preservation. The park was intended to be left in its natural state as a wilderness canoe area with no outside modifications such as roads, logging, mining etc. Since it was the first such endeavor, Ontario had taken an unprecedented step in saving one of our most valuable resources - our land. Since its establishment many people have enjoyed the solitude of the wilderness and the satisfaction of being able to travel on their own - by using their own muscles and none of the mechanized conveniences which are out of place in the wilderness. The question arises then: Can Quetico be preserved as a wilderness if such things as logging, roads, outboard motors, snowmobiles, trapping and aerial spraying of pesticides are allowed to occur? I would like to expound further upon each of these topics. I am reasonably sure, judging from past discussions, that my views are also the views of the entire Menogyn staff and also many of my friends who have had the pleasure of a wilderness canoe trip.

1. Logging - Here again we must examine what a wilderness area is. Certainly the area was never logged before man reached it. If Quetico is to be preserved in its natural state, I fail to see how logging would be in harmony with the wilderness idea. Even the so-called therapeutic logging is unnecessary - using the same argument. Therapeutic logging was never used in the past (the work was usually done by forest fires) so why now? This type of logging would probably necessitate road construction thus severely affecting the wilderness area concept.

2. Roads - I am opposed to the construction of roads of any kind of purpose in the park. There is much satisfaction in knowing that one can canoe for days and be free from the noise of cars and trucks and even the thought that roads exist! Coming across a road can severely affect one's wilderness experience as it has mine in the area around Northern Lights Lake and Icarus. Thus, if the wilderness quality is to be preserved, no roads should be allowed in the park.
3. Outboard Motors - Being a purist in the area of canoe tripping, motors have always been a pet peeve of mine. I realize that it is a somewhat selfish viewpoint, but I believe that motors should be used by the rangers for emergencies and other business, and that all other people should travel by canoe. If people are compelled to travel by canoe, I think they would also enjoy their experience much more. I think, also, that the sound of a motor tends to frighten the animals which live in the park and if the number of motors increased too greatly, there could be an effect on the ecosystem and the balance of nature.
4. Snowmobiles - Perhaps the greatest harm caused by snowmobiles is their noise. I am firmly convinced that they frighten the animals. This could have a serious effect on the animal life in the summer. If people want to snowmobile there are plenty of other good places besides Quetico!
5. Aerial Spraying with Pesticides - Here I might say, "Haven't we learned yet?" With the current controversy over pesticides and their effect on other animals (the Bald Eagle, a resident of the park, is in danger of extinction because DDT causes it to lay thin shelled eggs), I would hope that the committee would think very strongly about the necessity of using pesticides. Perhaps the committee could consider alternative methods of controlling the spruce budworm. One would be the controlled burning advocated by Bud Heinselman of the U.S. Forest Service. Since nature has always taken care of old forests and insect pests by forest fires, and modern fire fighting techniques has, in a way, stopped the natural processes, this would perhaps be a good time to experiment with controlled burning. Another alternative would be to find a biological control for the spruce budworm, either a natural predator (if there are any), a hormone, or a plant that they find repulsive. Many biologists have been working on the use of natural controls and perhaps they have discovered a control for the budworm. If pesticides are to be used, I sincerely hope that the committee will consider the effect of them not only on the spruce budworm, but on the entire ecosystem.

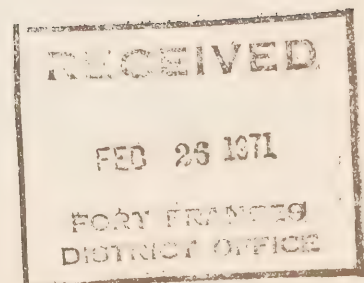
I realize that many of the above reasons are aesthetic but then isn't the wilderness experience concerned mainly with aesthetics? My experience canoeing in the wilderness has meant a great deal to me and has played an important part in my life. I sincerely hope that the Quetico Advisory Committee will act to preserve Quetico as a true wilderness area, not as a modified northwoods recreational area. Thank you for considering this brief.

Yours truly,

David J. Doty

David J. Doty
Macalester College
St. Paul, Minn. 55101
U.S.A.

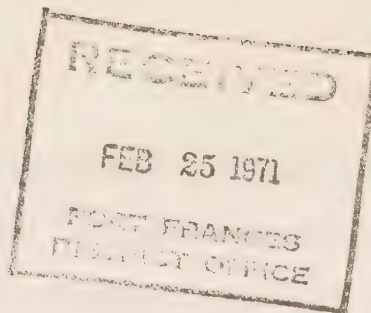
Brief

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DEPARTMENT OF ENGLISH

FACULTY OF ARTS AND LETTERS



22 February 1971

"QUETICO BRIEF"

Mr. R. T. Thomson
Quetico Advisory Committee
Department of Lands and Forests
Fort Francis, Ontario
Canada

Dear Mr. Thomson and Committee Members,

I am a Jesuit priest currently working as graduate student and teaching fellow in the English Department here at the State University at Buffalo. I am very hopeful that your committee will recommend the reclassification of Quetico Provincial Park. The press of academic and ministerial duties hardly allows me time to develop my case at length, but I want at least to communicate to you simply how I see the matter.

The park is a unique canoe and wildlife sanctuary; we have nothing like it in the United States, and Canadians have told me there is little else like it in Canada. I hope some of you gentlemen have spent some time in the park; I'm sure you have. My several vacations there have been enormously restorative, uplifting in ways I had not thought possible. It has to do not merely with natural beauty, but with the absence of man. One meets of course other parties of campers, but we are all visitors, travelers through. Nature on its own

terms, with its own time schedule and its own system of values, is present and available, without the need for elaborate camping apparatus or survival equipment. I have never found a spot that so freed me of radios, rented cars, menus, clocks, guidebooks, paved trails, lodges, reservations, all the details and tiny decisions that often make a vacation too much like ordinary life. In Quetico, in the undemanding quiet there, the civilized spirit is allowed to rest and regain perspective.

If the park is not classified "Primitive" it will be destroyed, robbed of the undisturbed forests and lakesides that make it what it is. Right now, the trash is piling up. About two miles into Lake Quetico out of Lake Cirrus there is a camp site on a point of the left shore, opposite Eden Island as I recall. Previous campers have set up benches and lean-to, hammering nails into the pines. Partly obscured by brush along the shore is a large dump of tin beverage cans, hundreds of them rusting away, thirty to fifty yards across. Who but motor fishermen, deposited by airplane, would lug sixpacks into Quetico? Similar carelessness has polluted the island in Walter Lake, a favorite fishing spot. "Primitive" park regulations would curtail this.

What can I say about logging? The noise, the devastation of forests, the roads--this is mindless, incompatible with the educational and recreational uses Ontario wishes to maintain the park for. Mr. Brunelle's press release last fall stated

that only those sections of the park seldom used for camping were being opened to logging. This misses the point. Wilderness should be preserved for its own sake. It does not become automatically expendable because campers aren't using it. This would be like California deciding to cut down only those redwood trees that people seldom looked at. These few square miles--will the logging industry suffer their loss? Canada will suffer a greater loss if Quetico goes the way of Algonquin.

I have written twice already to Mr. Brunelle. He has been kind to answer and keep me informed. I am pleased to know that he has appointed an advisory committee. Perhaps he has passed such correspondence on to you already, in which case these pages may seem redundant. I hope many people will be writing to you, especially young people; those I have met in Atikokan after their week in the bush seem very happy, transformed, opened up to some new dimension of life and of themselves. Read their comments with special care.

Thank you for your work. I hope you will find your way clear to preserve Ontario's wilderness.

Very sincerely yours,

Richard W. Bollman S.J.
Rev. Richard W. Bollman, S.J.

BRIEF
TO THE ADVISORY COMMITTEE
ON
QUETICO PARK
FROM DOMTAR PULP & PAPER PRODUCTS LTD.

INTRODUCTION

Domtar Pulp & Paper Products Ltd. welcomes the opportunity to present this brief to the Advisory Committee on Quetico Park.

Domtar Pulp & Paper Products Ltd. has had an opportunity to cooperate with others submitting briefs to the Committee, including the Atikokan and Lakehead Chambers of Commerce; the Lake of the Woods and Lakehead sections of the Canadian Institute of Forestry; and the Northwestern Ontario Timber Operators Association.

In addition, we have participated in the formulation of the brief as submitted by the Ontario Forest Industries Association, and concur with the views expressed therein.

These various submissions can be expected to deal at some length with the circumstances and factors directly affecting forest operations in Quetico Park. It is not the intention of this brief to add to that range of comment. Rather, it will touch upon some of the broader considerations that have an important impact on the Northwestern Ontario region, and on Ontario and Canada as a whole.

STATE OF THE INDUSTRY

It is imperative to achieve and to maintain a satisfactory balance between the needs of the environment as a part of our great natural heritage, and the day-to-day needs of people; a balance, essentially, between ecology and economy.

The development and the wise use of our natural resources is important to the economic growth of this country. But the preservation of those precious resources for future generations is equally important.

Domtar Pulp & Paper Products Limited supports public policies that ensure the health and survival of vital natural resources and that also encourage regulated resource use.

In making judgments that could affect the forest industry and its development, it is essential to consider some of the powerful influences that currently have a bearing on its economic outlook.

The forest industry is Canada's largest employer, providing some 300,000 jobs. Its exports are vital to the stability of the country's balance of payments. Domestically, the industry helps create and maintain high economic standards.

Yet, the industry itself has experienced - and continues to experience - a period of serious economic decline. Reduced profits, accelerated costs, rising competition, a growing need for major capital investment that is discouraged by shrinking profit margins are all factors behind a downward trend.

The industry's production level reflects existing conditions.

In 1950, Canada produced 28 per cent of the world's wood pulp. Last year that figure dropped to 23 per cent of world production. During the same period, however, the United States improved its position from 49 to 53 per cent of world production.

Canada's newsprint production fell from 72 per cent of world production in 1950, to 58 per cent in 1970. The U.S. production level, meanwhile, rose from 14 to 22 per cent of world production totals.

The trend is further evident in a decline of Canada's share of the U.S. domestic market by 10 per cent between 1955 and 1968. In the same period, our annual average increase in pulp production was the lowest among major world producers.

The industry in Ontario has experienced a decline in production and profits when compared with the other provinces. For instance, in the past 10 years, Canada's national average increase in pulpwood and pulp residue production was nearly four per cent. In Ontario, it was less than one and a half per cent.

Ontario also had the lowest annual average increase in pulp production.

Canada's competitiveness in the pulp and paper markets has suffered in the past decade. Despite the availability of abundant forest and manpower resources, the industry's output has failed to keep pace with the growth in world consumption.

Numerous factors have contributed to this disturbing and prolonged economic decline.

In Ontario, increased wood costs are probably the single most decisive reason for limited expansion and development in the pulp and paper industry.

Wood costs are influenced by several things, including transportation and labour costs.

Transportation costs are up significantly. The disappearance of the river drive, once Eastern Ontario's most economic means of transporting timber, has contributed to the problem. Under present conditions, the cost of pulpwood transportation from forest to mill can go as high as 25 per cent of the total cost of wood.

Transportation costs are also influenced by a number of outside factors, such as increasing costs of equipment, supplies and labour, as well as accelerated freight rates.

In 1962, the profit margin for the pulp and paper industry, and related forest industries, was 7.8 per cent. In 1969, 4.8 per cent. Last year, the profit margin was less than one and a half per cent.

In the face of such adverse conditions, the industry has been predictably reluctant to undertake major capital programs. Most mills in Ontario are old, and some equipment dates back almost half a century. Capital investments in Ontario's pulp and paper industry averaged \$121 million dollars annually between 1963 and 1968, but in large measure, these expenditures served merely to keep the equipment operable.

Canada's competitive position in world pulp and paper markets has been hurt by taxation that fails to provide incentive, and that is less favourable to the forest industry than is the case in other countries,

LOOKING AHEAD

* A comprehensive consultants' study undertaken for seven pulp and paper companies less than two years ago took this view of the future:

"Prevailing conditions are not encouraging to managements and investors, and are tending to inhibit the growth and development of the pulp and paper industry as a whole in Eastern Canada insofar as newsprint is concerned.

"Should the situation continue, the effect on the economies of the provinces of Eastern Canada could be severe in view of the major role played by the pulp and paper industry."

The report added:

"The pulp and paper industry in Eastern Canada must plan for a decade of change and development if its position is not to deteriorate further. Its capability to plan and to innovate in new directions must be developed to ensure its long-term prosperity and growth.

*"THE COMPETITIVE POSITION OF THE EASTERN CANADA NEWSPRINT INDUSTRY: A brief for seven Pulp and Paper Companies."
Kates, Peat, Marwick and Company

"The active interest of Canadian governments in the future of the industry must be realized if its position is to be maintained and improved."

Pollution abatement will be a critical area where long-term planning is essential. Heavy costs for the industry can be expected.

Ontario is poorly situated geographically because of water freight rates that are not competitive with rates enjoyed by several Quebec mills. Ontario is less favourably situated than either Quebec or British Columbia as far as overseas markets are concerned.

For these reasons among others, a determined effort to reverse the economic decline being suffered by the industry in this province must be undertaken.

CONCLUSION AND RECOMMENDATION

The preceding sections of this brief have attempted to illustrate some of the serious and complex questions facing the forest industry in Canada today.

They are questions that indicate quite clearly that the industry is in a difficult economic position. They are questions that could help determine how great a contribution the industry will make to the future economic well-being of this nation.

Actions or decisions which impede the development of the industry could prove shortsighted and damaging to the long-term interests of the people of this region.

Domtar's operations in Quetico Park, while important are a relatively small part of overall corporate activities. To nearby communities and people who live in them, they are undoubtedly of considerable importance.

We view the situation as a challenge to responsible and well-informed people to consider the merits of a well-controlled multiple-use program that ensures a healthy environment while encouraging important economic gains designed to benefit people.

Continuance of the present multiple-use policy in provincial parks, with stringent government control over all harvesting activities, seems worthy of consideration by this Committee as a wise course to pursue.

--

143 Traill Ave., Winnipeg 12, Manitoba.

March 17, 1971.

Mr. R.T. Thompson
Department of Lands
and Forests,
Fort Frances, Ontario.

Dear Sir:

Re QUETICO PARK

I ask that you will excuse the lateness of this letter, and that you will bring it to the attention of the Quetico Park Advisory Committee. I am writing as a property owner in the Province of Ontario, as representative of a small private canoeing club, and as a concerned citizen of Canada.

Mining and lumbering resources are relatively plentiful; recreational resources are becoming less so. My friends and I therefor ask that your committee and the government of the Province move for the TOTAL ELIMINATION OF NON RECREATIONAL ACTIVITIES FROM THE PARKS. Our parks are for us, the people. When we cannot visit them and use them without encountering the unsightly and often bothersome evidence of commercial activities, then we the people are being cheated. Please restore our parks to us and stop the rape of our lands.

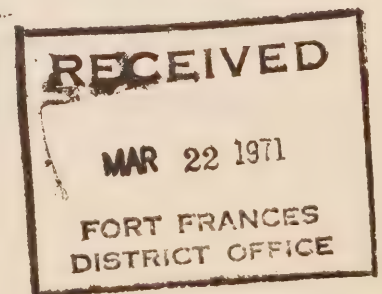
The mining developers will say that minerals are no good if merely left in the ground: that they must be exploited if we are to have prosperity. I reply:

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M.M. Robinson High School

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2425 Upper Middle Road
BURLINGTON, ONTARIO

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Phone 634-5588

OFFICE OF THE MINISTER
LANDS AND FORESTS

Wednesday, March 10, 1971.

Attention committee on Quetico Park:

A few months ago, the Quetico National Park issue was brought to our attention through the news media. Being grade thirteen students from Burlington and studying current, Canadian problems, we decided to take it upon ourselves to look into this issue more fully. With the aid of the mass media and under the guidance of our geography teacher, Paul Valentine, we gathered sufficient data to formulate a public opinion poll.

Our main and foremost objective was to make this poll as unbiased as possible, in order to obtain the true opinions of the general public.

We distributed two hundred and twenty-one questionnaires and one hundred and eighty-three were returned. The results showed that 23.5 per cent of the general public supported the ideas of the Department of Lands and Forest and that 76.5 per cent, supported the ideas of the Conservationist's Policy.

Regarding the graph, one can conclude that the public was mainly concerned with the attitude for maximum recreation use in the Lands and Forest Policy. Secondly, they were concerned with the present pulp and paper development.

With the Conservationists' policy, we found that the deepest concern was for the preservation of a wilderness area, regardless of human use. Secondly, they were concerned with the preservation of a wilderness area for future generation use.

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Looking at the graph, we concluded that the majority of the general public was concerned for the preservation of a wilderness area, as stated in the Conservationists' policy.

Today, while people are concerned with Canada's economic growth, they above all want to preserve the few virgin forest lands, remaining in Canada. With the ever increasing growth of cities and I might add, pollution, the people want to enjoy these "sanctuaries" now, and too, they want the security of knowing that there will be a place for their children to go. We must meet our needs first.

We are not asking much, we are only asking you to read and consider carefully the results we have brought to your attention. In our world of free democracy, the people are supposed to have a great deal to say in determining the actions that the leaders take. So is the case in this controversial situation. We have the right to our opinions and the right that they be looked into by our leaders. The next step is in your hands and we, the public are counting on you to make the final and correct decision. We know what it is...do you?

Sincerely

Debbie Watson
Gonda Lortwright
Don Corbett

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- i) present economic pulp and paper development
- ii) future economic pulp and paper development
- iii) L and F attitude for maximum recreation use
- iv) preservation of a wilderness area for your personal use
- v) preservation of a wilderness area for future generation use
- vi) preservation of a wilderness area for its regardless of human use

QUETICO PARK ISSUE

This is a public opinion poll, being conducted by the M. M. Robinso Grade 13 Geography Class.

Your name is not required on this questionnaire as it is a public opinion survey only.

There has been some concern generated by Ontario residents about the use being made of Quetico Provincial Park in Northern Ontario. Please read the two points of view as stated by Rene Brunelle, Minister of Lands and Forests and by Gavin Henderson, the Executive Director of the National and Provincial Parks Association. Upon completion of this, please take a few minutes to answer the questionnaire. Your answers and opinions will assist us in submitting a public brief to the provincial government advisory committee, appointed to study this matter.

DEPARTMENT LANDS & FOREST VIEW

- Advisory committees have been established for Public opinions.
- Committee considers ecological implications when framing their recommendations for the management of this park.
- The committee has recommended to refrain from issuing licences to cut timber in Quetico Park under the O & M agreement, until final report to the Minister is made.
- It has been charged that this committee is only a stalling tactic.
- Commercial cutting at this time is confined to the North-east section and affects less than a half of one percent of the area of the park each year.
- Studies showed that this part of the park does not compare in terms of recreational quality and potential with the other parts of the park.
- Hunter Island is the main area of recreational use and it has been strictly set aside for recreation exclusively.
- The timber management unit area in the Northwest (also referred to as the O-M Volume agreement area) is the next most heavily used area and rated as moderate on Government scales.
- The possibility of conflict between recreational and commercial cutting in the park today is slight.
- High pressure for recreational use may expand to the North-east section; therefore existing policies must be constantly reviewed to curtail or eliminate this kind of cutting if either action is warranted.
- 95% of the recreational utilization is American
- The Government has been urged to re-classify Quetico from a National Environment Park to a Primitive Park.
- Primitive classifications impose stringent restrictions, catering to a much narrower range of interests. Camp grounds would have to be phased out and no roads would be permitted within the park. Also outboard motors would be banned. It is felt that this move would not be in total public interests.
- The Government has been urged to block the proposed sale by Domtar, of its interest in Jim Mathieu Lumber company to O & M.

DEPARTMENT LANDS & FORESTS VIEW - PAGE 2

- O & M is a good corporate citizen of long standing in the Ontario town of Fort Frances, employing over 1000. It will need the pulpwood and chips from Jim Mathieus Licence and sawmill, for its 503,000,000 dollar expansion at Fort Frances. The Government has earnestly sought expansion of the woods industry which accounts for 70% of Northwestern Ontario employment.
- The Government believes it has responsibilities to O & M to meet wood requirements of their expanded facilities. The Governmnet is aware of the great recreational value of Quetico Park and supposidly intends to preserve it.

QUETICO WILDERNESS PARK - (CONSERVATIONALISTS
VIEW)

- the only nature park in Ontario that hasn't been exploited
- 120 miles west of Thunder Bay
- 1,750 square miles on the Ontario - Minnesota border of untouched wilderness, virgin forests, and crystal clear streams and lakes.
- Gov't of Ontario recognizes this but plans to destroy it anyway.
- licenses have been issued to 2 large American companies to cut over half the trees
- if these licenses aren't revoked, the companies will have roads criss-crossing the entire park.
- after the lumber is gone, the roads will be public, exposing the lakes to tourists, motor boats and pollution
- logging, today is a highly mechanized operation that disturbs the environment
- in the U. S. the wilderness areas are protected by law, but not so in Ontario
- Gov't of Ontario refuses to establish any wilderness areas despite being continually reminded of the need. This is the only province that has not done so.
- Lands and Forest Minister Rene Brunells says that logging in Quetico is "carefully controlled"
- An aid to Mr. Brunells, Gavin Henderson, has seen the desolation left by these operation
- a citizens committee to Prevent the Destruction of Quetico has been formed and is going to show the government where the public stands on this issue.

QUESTIONNAIRE: QUETICO PROVINCIAL PARK

- I. Do you have prior knowledge of this issue?
_____ yes _____ no
- II. Have you developed a prior opinion on this issue?
_____ yes _____ no
- III. This issue has been accepted as a two sided point of view. Do your opinions support:
I) Department of Lands and Forests _____ yes _____ no
II) The Conservationists Policy _____ yes _____ no
- IV. If you support the Lands and Forests policy,
rank the following in order of greatest concern.
I for greatest concern, 2 and 3 for lesser concern.
- i) present economic pulp and paper development _____
ii) future economic pulp and paper development _____
iii) Lands and Forests attitude for maximum recreation use _____
iv) Any other personal reason please state _____
- V. If you support the conservationists policy,
rank in order of priority using I for greatest concern, 2 and 3 for lesser concern,
- i) preservation of a wilderness area for your personal use _____
ii) preservation of a wilderness area for future generation use _____
iii) preservation of a wilderness area for its regardless of human use _____
iv) any other personal reason please state _____

Thank you for assisting the grade 13 geography students of M. M. Robinson High School. We shall convey to you any reply received from the Provincial Government concerning the nature of our brief.

Q U E T I C O P R O V I N C I A L P A R K

from: The Fort Frances Chamber of Commerce

ECONOMIC CONSIDERATIONS:

1. LOGGING: We are convinced thatⁿ certain amount of logging in the Park is necessary to the economic well being of the District. Evidently all of the available timber in the District has been committed and if we are to expand our economy, based on forest products, at least partly, we must wisely use that renewable resource that will almost certainly be destroyed by fire and/or overage.
2. Mining: The minerals which may be in Quetico Park are non-renewable resources. They are NOT subject to destruction either from natural nor accidental hazards. While exploration and mapping for inventory purposes are to be hoped for we do not believe that mining, as such, would be advisable at the present time.
3. Tourism: The development of this industry is greatly to be desired and a successful tourist industry, privately operated, does make a large contribution to our economy, we do not believe that Quetico Park should be exploited as a commercial proposition, either by government or private operators.
4. Recreation: With our present low population and the distance of Quetico Park from the population centres of Ontario we can see little recreational use of the Park by Canadians at this time. However the advent of the Voyageurs National Park to the, more or less, immediate South should increase the use of the Park, but for the present, by U.S. citizens. This will provide very little economic advantage for either Canada in general or the District of Rainy River in particular.
5. In our opinion very closely supervised trapping, watched intently to guard the ecological balances, should be permitted in the Park, in certain zoned areas. Careful husbandry here should give some economic benefit to the nearby native people.

(cont. on 2)

7. CONSERVATION OF QUETICO PARK

1. Timber and Other Flora: Trained and qualified foresters have for years said the forests and their related flora do benefit from proper cultivation, thinning, draining, seeding and fertilization. We believe that the time has come when chosen areas of the Park should be set aside for intensive care and development for eventual recreational use. (Just leaving it standing subject to all the hazards to which it is subject will mean its certain death).
2. Game and Fish: Careful husbandry of these essential components of the Park, as in the above paragraph are, again a necessity and should be protected with great care to preserve the balances necessary to their well being.
3. Water Quality: Should be automatically maintained if the above recommendations are carried out.
4. Overuse and Waste Disposal: We have been told by Forestry people that the overburden in the Park is generally very thin and that heavy use does retard regrowth. Properly zoned areas for present use may be set aside and the rest of the park be limited to a limited use until the effects of the above proposals have prepared the land for more intensive human invasion. We believe that, as much as possible, Park employees should tend to garbage disposal either by themselves or by those who are using those areas zoned for them.
5. Power Equipment: The use of powered equipment should not be generally permitted in the Park except for Park maintenance and by those licensed by Park authorities in areas zoned for recreational use by that sort of equipment.

FEES FOR PARK USE

1. Overnight Campers: In certain designated and prepared areas overnight campers may be permitted and the fees charged by the Department in other overnight camping grounds should be suitable.
2. Canoe Parties: Canoe parties should be permitted only over specified routes, well marked, and should be carefully supervised by Park personnel. Only Canadian resident outfitters should

(cont. on 3)

handle these parties and they should be charged for this use of the Park and should be held responsible for the control of their parties.

3. Commercial Licenses: We believe that certain commercial licenses may be permitted both for the canoe outfitters and others whose properties are adjacent to the Park. The commercial operators must have parties only in areas zoned for such use and be fully responsible for any of their parties in the Park. Fees for such use should be charged.
4. Guides: Only Ontario and Park trained guides should be used in the Park.
5. Fishing Licenses: We believe that fishing licenses should be issued according to Ontario regulations and should be issued only by Park authorities or properly licensed Park commercial outfitters located in Canada. We recommend that special license arrangements may be made for supervised school groups.

FUTURE USE OF QUETICO PARK

1. Voyageurs National Park: We fear that this new U.S. National Park will put great pressure on Quetico Park, which in its present state, will cause considerable damage. Zoning, careful control of entry, close supervision and restricted areas will be a MUST.
2. Canadian Use of Park: Because of its distance from Canadian population centres we do not expect that Canadian use of the Park will be greatly increased in the near future. But preparations for greater use cannot start too soon.
3. Accesses From Canada: If the Park, as we conceive it, is to have any economic value to the community most of the entrances should be Canadian and American visitors should be brought in through Canadian gateways.
4. Campsites and Portages: Campsites and portages should be built and maintained on designated routes and Park use limited to these routes.

TYPE OF PARK

Zones: Because of the great areas of the Park and the impossibility of supervising and maintaining such large areas, we believe

that "Use Zones" should be established. Certain parts of the Park should be restricted and prepared for future use. Multiple use of other parts, such as logging, may be allowed but we suggest that the logging should be done by the Department and the timber sold to local forest industries in agreed upon quantities and at a price comparable with that which they could produce it themselves. The price received by the Department should cover a large part of the cost of development of those parts of the Park. Certain recreation zones should be maintained at convenient locations to Ontario Highways.

* All of the above is respectfully submitted by the Fort Frances Chamber of Commerce.

The intent of this brief has been supported by Dryden and Terrace Bay Chambers of Commerce.

In essence the Thunder Bay Chamber of Commerce' brief proposes what is also incorporated in this one.

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BRIEF TO THE QUETICO ADVISORY COMMITTEE
PRESENTED ON BEHALF OF
THE MARGARET NICE ORNITHOLOGICAL CLUB

The Margaret Nice Ornithological Club is a group of women dedicated to conservation in the widest sense of the term. They are concerned about the issue of logging in Quetico Park and have approved the submission of the following brief on behalf of the Club.

You know the facts. I'm taking another angle looking back in time.

My grandparents emigrated to Upper Canada in 1870 to claim a land grant on Vernon Lake north of Huntsville.

By 1870, Muskoka and Parry Sound Districts had already been denuded of pine forest. Those who farmed the light sandy soil earned a meagre living. When I was ten years old we used to go to the pineries to pick blueberries. It sounded nice, but the "pineries" was actually a barren wasteland.

Hardwood took over and in time it, too, was cut. Down the lakes and rivers floated the great booms of logs. In 100 years the hardwood has been exhausted and Muskoka and Parry Sound Districts depend largely on tourism. In the main, the people are poor. They farm on marginal land. Have we reforested? No.

Many years later, I became a natural history photographer and tramped through woods that my father had known in his youth.

After fifty years the scars of logging were still there. It takes a long, long time for slash to rot and go back to soil. In the open spots, raspberry canes, blackberry brambles and thistles galore, had taken over. In all my wanderings I found few areas that had been left untouched. I remember two of them vividly - a black spruce bog carpetted with green mosses, ferns and orchids, and a shallow waterlily lake formed by beaver that had dammed a creek 75 years ago.

It seems unbelievable, but it's true, that in 100 years Ontario finds it necessary to establish wilderness areas for succeeding generations. Quetico Park is one. Area, 1750 square miles.

• And what are we doing? Logging it - 468 square miles leased to the Jim Mathieu Lumber Company and 400 square miles of Timber Management Unit. Yet, Quetico Park has less than one percent of available timber. There's available timber outside the park. Why, - why log the park? I question our sense of values. Will we never learn?

A forest is a miracle of delicate balance - a web of interrelation between plant and animal life. Timber management insists that it's necessary to eliminate dead and diseased trees. But dead trees house raccons and flying squirrels. They're cupboards for the pileated woodpecker. That slow, resonant rap means the big pecker is probing for carpenter ants.

When we log an area, we disrupt animal life. The

delicate ground cover, mosses, ferns and wild flowers, is destroyed. It takes nature a long time to erase the havoc. Fifty years and more. Another generation will have passed.

We, the people, want Quetico Park to be free from logging: that's the issue.

S. Dillon Ripley, secretary of the Smithsonian Institute, believes that in 25 years all wild animals - three-quarters of the species living today will be extinct.

We didn't believe Rachel Carson when she wrote Silent Spring. We know the truth now. We had better heed the warnings. Wilderness is shrinking fast and logging is absolutely incompatible with wilderness.

People need wilderness. My lawyer and my eye specialist are hard-pressed men. They find relaxation and renewal in canoe trips - but not in Ontario parks. They go farther afield beyond the range of power saws. With our increasing population and our congested cities we're going to need wilderness more and more.

I sometimes wish that we could transport the men who head the Department of Lands and Forests and big lumbering companies to a country that was raped of trees centuries ago. Greece, for example. There, after the olive tree pruning, peasants garner every twig and carry great bundles home on their heads for winter fuel. And the old women, with their short hatchets, chop the furze on the bare and rocky hillsides and dry it, too, for winter fuel.

In the spring, raging torrents of water cut deep gouges on those bare and rocky hills and the top-soil is gone. Poor! We talk a lot about poverty, but we don't know what poverty means.

If our timber cutting in the next 100 years equals our cutting in the past 100 years, we'll be in trouble.

Now, in Ontario, in the year 1971, is the time to make a stand and take a long, hard look at our vanishing wilderness.

May I suggest that we begin with Quetico Park. NO LOGGING IN THE PARK FROM NOW ON.

Respectively submitted on behalf
of the Margaret Nice Ornithological
Club

Per Grace Fraser Malkin

APR 15 1971

Mr. L.H. Paquet,
Domtar Woodlands Ltd.,
Domtar House,
6th Floor

LA PRESSE, Montréal, 10/4/71

Hausse de 59% de la construction domiciliaire à Montréal en mars

Le volume de construction domiciliaire dans la région de Montréal a augmenté de 59 pour cent au mois de mars par rapport au même mois de l'an dernier. Au total, pour la région du Québec, la Société Centrale d'Hypothèque et de logement annonce que 6,404 unités ont été mise en chantier dans les centres urbains, c'est-à-dire dans les agglomérations de plus de 10,000 habitants, au cours du premier trimestre de 1971. Pour la même période de l'an dernier, 5,035 unités avaient été commencées.

Selon les données préliminaires, la tendance à la hausse constatée dans la construction d'habitation au mois de février s'est poursuivie en mars. De fait, 2,886 unités de logement ont été mises en chantier durant ce mois, dans les centres urbains de la Région, contre seulement 1,564 unités enregistrées l'an dernier.

Cette hausse est répartie sur tous les genres de logement.

Durant le mois en rubrique, le volume de construction domiciliaire dans les trois centres métropolitains de la province était supérieur à celui noté pour la même période de l'an passé. Ainsi, 1,488 et 334 unités ont été amorcées respectivement à Montréal et Hull en mars — soit des augmentations de l'ordre de 59 et 21 pour cent sur les niveaux correspondants de l'an passé. Entre-temps, Québec a vu son niveau d'activité passer de 125 à 456 unités.

D'autre part, la Société centrale d'hypothèque et de logement a révélé qu'il y a eu 9,25 habitations mises en chantier dans les centres urbains, au cours du mois de mars, soit 26.1 pour cent de plus que le total de 7,345 enregistrés pour le même mois de 1970.

La Société signale en outre, dans un communiqué, qu'au cours de ce premier trimestre de l'année, 24,001 logements ont été mis en chantier, soit 24.1 pour cent de plus que durant la même période l'an dernier.

Les maisons unifamiliales ont accusé la plus forte augmentation, soit 44.3 pour cent. L'augmentation des immeubles à logements multiples s'élève à 19.5 pour cent.

THE FINANCIAL POST, Toronto, 10/4/71

'In area so vast, can't 3% of the land be park?'

The comments by A. S. Fleming, vice-president and general manager, Domtar Woodlands Ltd., Montreal, in your column The Executive View (FP, April 3), are typical of the misrepresentations by the forest industry against the conservationists.

Fleming says: "We're now having problems with conservationists who question our practices and with the public which wants greater access to our timber limits. We're not against the multiple use — we've always let the public into our limits. The point is that now these groups sometimes want us out."

Fleming neglects to mention the location of the timber limits under question. In Ontario, they happen to be located in five of the province's major provincial parks — Quetico, Algonquin, Lake Superior, Killarney and Lake Missinaibi. There are 181,097 square miles of exploitable forest area in Northern Ontario.

The forest industry and the Department of Lands and Forests include these five parks — which together represent 3% of this area — in their commercial forest inventory.

We recognize the importance to the economy of the forest industry's activities in the Northern Ontario forests. However, we do suggest that in a province as rich in forest resources as Ontario that at least 3% of this vast area might be managed to make the most of the park values rather than commercial values. Fleming obviously does not agree.

As to Fleming's claim that they always let the public into their limits, how does he explain the No Trespassing sign on the Domtar-Mathieu timber limit in Quetico Provincial Park?

Gavin Henderson,
Executive Director,
National & Provincial
Parks Association of
Canada,
Toronto.

DIMANCHE-MATIN, Montréal, 11/4/71

Des usines de papier ont fait des efforts

(DNC) — Le gouvernement provincial a déjà fait savoir que des procédures judiciaires seraient intentées contre les compagnies de pâtes et papier qui ne se seraient pas conformées à une ordonnance de la Régie des eaux, les enjoignant de réduire à 3% la quantité de déchets solides déversés dans les affluents.

Depuis que cette nouvelle a été annoncée, plusieurs compagnies se sont conformées aux exigences de la Régie: Price à Alma; Scott Paper à Crabtree; Consolidated-Bathurst au Cap-de-la-Madeleine; Domtar Newsprint à Donnacona et St-Raymond Paper à Desbiens.

Cette action entreprise par la Régie des eaux pour lutter contre la pollution remonte à 1965. Cette année-là, une équipe de l'Association canadienne des pâtes et

papier et de la Régie terminait un relevé de qualité des effluents de toutes les usines de pâte et papier au Québec. Les résultats indiquaient que dans l'ensemble, les usines rejetaient à rivières 1,423 tonnes par jour de solides en suspension. Le 11 avril 1969, la Régie émettait une ordonnance visant à réduire en deux phases la pollution causée par ces usines. L'ordre suivant fut donné: au décembre 1969, la quantité ne devait pas dépasser 3% du chiffre de production d'une usine. En février 1970, les rejets étaient encore trop considérables. La date limite était fixée au 1er juillet dernier, après quoi des procédures seraient intentées. Il restait des usines qui ne s'étaient pas conformées. Dernièrement, cinq d'entre elles plaient aux exigences de la Régie.

ving propositions pour éviter la fermeture éventuelle des usines de Windsor et East Angus

Par Jean SIMONEAU
EAST ANGUS — Un total de
ving propositions ont été pré-
sentées pour donner suite à la
règle d'information sur le
problème des pulpes et pa-
pers, problème qui, selon le
rapport présenté par l'écono-
miste Yvon Valcin, pourrait
entraîner à long terme la fer-
meture de l'usine Domtar à
Windsor et, à court terme, la
fermeture de celle d'East An-
gus.

Depuis, a précisé M. Val-
cin, la situation n'est pas dé-
gradée puisqu'il a connu des
années de vieilles industries en
rope qui ont été sauvées.
Tout le monde veut, en-
fin, il n'y a pas de raison
pour laquelle on ne puisse pas renver-
ser la situation présente",
affirme M. Valcin.

La première proposition de-
mande la formation d'une com-
mission tripartite à l'échelle
provinciale pour trouver des
solutions, puisqu'il est main-

tenant prouvé qu'il y a de sé-
rieux problèmes dans l'indus-
trie des pâtes et papiers.

Par ailleurs, on demande
que le Syndicat de l'in-
dustrie papetière et les com-
ités municipaux fassent pres-
sion sur les autorités gouver-
nementales, de façon à ce que
ces-ci assurent la région de
produire aux besoins en ap-
provisionnement en bois, per-
mettent par de nouveaux in-
vestissements pour rendre les
usines concurrentielles, et ga-
rantisent ainsi l'accéléra-
tion de la production par le
même de façon définitive
la non-fermeture des usi-

La troisième résolution de-
mande à la Commission de
modification du ministère des
Terres et Forêts de fournir
l'échéancier quant à ces étu-
des auxquelles la CSN
n'a pas été invitée à partici-
per.

À la suite d'une intervention
du maire de Bromptonville, il
a aussi été décidé de deman-
der au ministère des Terres et
Forêts de se prononcer sur la
question d'approvisionnement
en bois, en fournissant un dos-
sier techniquement éprouvé.

Par ailleurs, M. Serge Racine, du CRAR, après avoir sou-
tenu, au cours de la soirée,
que les chiffres d'approvision-
nement en bois sont faux dans
le rapport, a demandé l'aide
des autorités et du syndicat
pour obtenir les photos aérien-
nes prises par le ministère des
Terres et Forêts en 1968, afin
d'effectuer l'étude sur la quan-
tité de bois dans notre région.
Il a fait savoir que le gouver-
nement qui les a prises à mê-
me notre argent exige \$8,000
au CRAR pour les laisser al-
ler, afin que l'on en fasse l'é-
tude. "Le département de géo-
graphie a les instruments né-
cessaires", a-t-il fait remar-
quer.

Par ailleurs, à quelques re-
prises, on a demandé que, si
des subventions sont versées
à ces compagnies, les travail-
leurs aient un mot à dire dans
l'administration de celle-ci,
c'est-à-dire qu'il y ait co-ges-
tion.

Devant les données fournies
par M. Serge Racine, du
CRAR, chiffres qui sont con-
tradictoires à ceux fournis par
la CSN, et qui avaient été puis-
sés au ministère des Terres
et Forêts, M. Valcin a expri-
mé l'avis qu'il ne demande pas
mieux que les chiffres four-
nis dans le rapport ne soit pas
exactes puisqu'ils pourraient
alors forcer les compagnies à
réinvestir dans la région et
ainsi s'assurer qu'elles ne fer-
ment pas les portes.

Selon M. Valcin, dans les
Cantons de l'Est, le problème
des pulpes et papiers doit être
envisagé dans l'ensemble d'une
situation économique difficile.
À son avis, le problème con-
siste dans l'alternative de lais-
ser les industries déperir ou
faire de nouveaux investisse-
ments pour les rendre concu-
rentielles, modernisation qui
entraînerait des mises à pied.
À ce moment, le principal pro-
blème est le recyclage de ces
employés ce qui exige, dans
la région la création de nou-
veaux emplois pour le rendre
possible.

Par ailleurs, M. Valcin a fait
ressortir le fait que deux poli-
tiques du gouvernement fédé-
ral sont à la source de deux
des principales causes des
difficultés que connaît actuel-
lement l'industrie des pâtes
et papiers: le dollar flottant
et le Kennedy Round. Parmi
les causes internes importan-
tes, il faut retenir dans le cas
de notre région, la vieillesse
des usines.

Dans les causes du problè-
me actuel, M. Valcin a insisté
sur la question du marché ren-
du difficile à cause des nou-
velles industries dans le sud
des États-Unis et dans la Co-
lombie Canadienne. M. Valcin
a souligné le manque d'agres-
sivité dans le domaine du mar-
keting des compagnies con-
cernées. Il a d'ailleurs expli-
qué que la Kruger, de ce côté,
fait un très bon travail, ce qui
explique que sa situation est
différente.

THE GAZETTE, Montreal, 14/4/71

Tax relief needed— construction head

HALIFAX — (CP) — The
Canadian Construction Associa-
tion is "very hopeful" that
the federal government's 1971-
72 budget will take steps to
relieve the construction indus-
try from taxes on building
materials, Association Presi-
dent Robert C. T. Stewart
said here yesterday.

In an address to a service
club, Mr. Stewart commended
the Nova Scotia and New
Brunswick governments for
granting relief from provincial
sales taxes on building ma-
terials.

Ottawa and the other prov-
inces should follow their ex-
amples.

BILL PASSED

In a bill passed by the Nova
Scotia legislature last Decem-
ber, the new Liberal govern-
ment removed the seven-per-
cent provincial sales tax on
building materials used in
constructing new homes.

The New Brunswick Pro-
gressive Conservative govern-
ment, elected last October,
removed the province's eight-
per-cent sales tax from all
building materials.

Mr. Stewart said his asso-
ciation had long urged gov-
ernment to exempt from sales
taxes the materials and
equipment used by the indus-
try.

There were "a tax on
capital investment," increas-
ing the cost of investment and
making it "more difficult."

The construction industry
was the only one to have its
equipment taxes at the fed-
eral level while "better equip-
ment is our main medium for
increasing productivity and
curtailing cost increases."

Mr. Stewart said that if
Ottawa cannot exempt build-
ing materials and equipment
generally then it could extend
the current rebate system
applied to schools to projects
"whose execution is particu-
larly desirable," including fac-
tories and houses.

THE STAR-PHOENIX, Saskatoon, 5/4/71

Opposition fights to end but pulp mill approved

S-P Legislative Bureau

REGINA — The controversial bill giving the government authority to participate in financing and partial ownership of the \$177 million Athabasca pulp mill was given third reading Saturday in the legislature.

The bill, which has been strongly opposed by the NDP opposition, passed by a vote of 28 to 15. All Liberal members present voted for the bill, and all 15 NDP members present voted against. Standing in the legislature is Liberal 34 and NDP 24.

Before voting against third reading, three NDP speakers summed up their criticisms of the bill since it was introduced March 12.

Woodrow Lloyd (NDP-Biggar) said the project is supposedly private enterprise, yet public resources and public funds are being used.

The opposition was not satisfied there would not be extensive long-range damage to the surroundings of the mill, he said.

Walte Smishek (NDP-Regina North East) said the opposition questions the gov-

ernment claims as to the number of jobs the venture will provide, since the claims for the Prince Albert mill were exaggerated.

The public money to be spent on the mill would be better spent on helping farmers, small businesses, providing parks and recreation.

W. J. Berezowsky (NDP-Prince Albert East-Cumberland) said the government was betraying the people of the province with their own money.

The people had not been consulted about the proposal,

and should have been given a chance to state their opinion.

The government had indicated the pulp mill was to be an important issue in the election, and now seemed to be backing off from it.

"Let's go back to that as an issue. Then if you are right and the people vote for it, I'll admit I was wrong."

R. A. Heggie (L-Manley) said that besides the 1,200 men that would be employed in construction of the mill and 1,600 in the eventual mill and the woods operation, about 4,000 would be employed in

support industries and businesses.

"Private people are already willing to spend hundreds of thousands to get in on the ground floor of retail, wholesale and recreational projects," he stated.

Provincial Treasurer Steuart summed up the government's case, stating one important factor is that the government knows exactly who it is dealing with. The main company is Parsons and Whittemore, owned almost entirely by Karl F. Landegger, and there are no hidden owners, as was the case with the

Churchill Falls project in Manitoba, now under receivership.

Parsons and Whittemore is one of the largest and most competent in the world and the government has faith in it because it kept its promises in regard to the Prince Albert mill. P and W owns 70 per cent of that project, and the government 30 per cent.

The government is satisfied as to the project's viability and pollution control measures. The federal department of fisheries would not permit

the project to proceed if it was not satisfied.

Mr. Steuart said the NDP would have to answer to the people for "attempting to sabotage" a project designed to provide jobs.

"We'll again see strike after strike, as there was at Prince Albert, and the people can point the finger in only one direction and that is at the NDP."

"If by some strange tragedy, they are elected, it will be taken over, and I predict the mill will have a very short life."

THE MONTREAL STAR, 8/4/71

Connie to expand Bathurst mill

Premier Richard Hatfield says the New Brunswick government had been given a "firm proposal" for modernization and expansion of the Bathurst Consolidated paper mill at Bathurst. The proposal had been submitted on a confidential basis, the premier said.

Eighty-four men were laid off when the company transferred boxboard manufacturing from the Bathurst mill to its plant at Grand'Mere, Que., at the end of February.

LA PRESSE, Montréal, 8/4/71

Premiers résultats de la Campagne des Fédérations

La Campagne des fédérations a annoncé, hier, son premier résultat de 1971, soit qu'elle a recueilli jusqu'ici plus de \$4 millions de son objectif de \$11 millions.

Ces premiers chiffres comprennent les dons qui seront faits tout au cours de l'année

par le mode de déduction lariale et ils représentent \$200,000 de moins que ce qu'il avait été prévu pour la date.

La Campagne des fédérations subventionne 112 sociétés communautaires dans la région du grand Montréal.

GLOBE AND MAIL, Toronto, 9/4/71

Industrial relations bill in N.B. would bring sweeping changes

By KENNETH CHISHOLM
Special to The Globe and Mail
FREDERICTON — A new industrial relations act containing sweeping changes has been introduced in the New Brunswick Legislature by Labor Minister Rodney Logan.

The legislation provides for accreditation of groups of employers as the exclusive bargaining agent for employer associations and for recognition of councils of trade unions as the bargaining agent for building trades unions. The provisions will give recognition to multi-employer, multi-union bargaining.

It contains a separate section dealing with the construction industry. Further facilitating handling for industrial relations procedures, the bill calls for a separate division of the Labor Relations Board, with representatives of management and labor in the construction industry. This division will process all applications to the board for certification, revocation of certification, etc., initiated by parties in the industry.

In explaining the new legislation, the Labor Minister referred to labor jurisdictional disputes that often lead to wildcat strikes. He said that employers "often are powerless in these situations since no matter which union is given the work, the employer incurs the wrath of the

other." Under existing legislation, he added, no remedy is provided.

The new law will provide that the parties name jurisdictional dispute representatives or tribunals to whom such disputes may be referred. Further, "pending settlement by the representatives of tribunals, the Labor Relations Board may issue orders or directions and such interim orders may be filed with the Supreme Court and become enforceable as orders of the court."

Legal entities

Among other highlights of the legislation:

—Trade unions, councils of trade unions and employer organizations are declared to be legal entities, capable of suing and being sued in their own names.

—Where strikes or lockouts occur before all the steps contemplated by the law have been taken, the Labor Relations Board would have authority to declare such work stoppage to be unlawful. When such a declaration is made, picketing will be prohibited. In the event of a lawful strike, or lockout, the party intending to strike or lockout must give the other party at least 24 hours notice in advance.

—The definition of an employee is broadened to include

members of the medical, legal, architectural, dental or engineering professions, as well as agricultural workers.

—Voluntary authorization for reduction of union dues, on a prescribed form, is provided in the legislation. Where the authorization is in writing from the workman, the employer will be obligated to honor such authorization.

—If there is inability to reach a collective agreement between a municipality and firemen, items in dispute must be submitted to final and binding arbitration.

—Firemen cannot strike or be locked out. However, police officers are not automatically prohibited from striking, nor must they submit disputes to arbitration. But the Lieutenant-Governor in Council may issue an order prohibiting such action in the interest of public welfare and safety.

—Before a lawful strike takes place, a secret ballot vote must be taken. Eligibility of voters is provided for, as well as control of the ballots after voting.

Employer's right

The new act will state the right of an employer to express his views during a campaign to organize his employees, provided that in so doing he does not contravene any of the provisions of the legislation. The legislation prohibits

intimidating, coercing, threatening, discriminating, refusing to employ or continue to employ, promising, altering terms of conditions of employment.

Time limits are established in the collective bargaining process with a view to speeding up the negotiations and avoiding undue delay. Where negotiations are unduly prolonged and no collective agreement has been reached, the bargaining rights of the parties may be terminated upon application.

The present act permits a trade union that has replaced another trade union to terminate a collective agreement upon two months notice to the employer, regardless of the term of the agreement. Mr. Logan explained in noting another change. The new act, he said, "will provide that where long-term agreements (for more than one year) are entered into, they will remain in force until their termination date, even though the bargaining agent may change during the term of the agreement." The agreement may be terminated before its expiry only with the approval of the industrial relations board after it has conducted a thorough inquiry.

THE GAZETTE, Montreal, 7/4/71

Mill strike continues

A strike by about 300 employees of Consolidated-Bathurst Ltd. continued at New Richmond, Que., supported contract demands.

The company says the main

issue in the strike, which began Saturday, is the length of a new contract to replace the previous collective agreement which expired at the end of September.

THE VANCOUVER SUN, 3/4/71

Mill start set

SASKATOON (CP) — Construction of a \$177 million pulp mill at Dore Lake, Sask., will begin next month, Joe Condon, vice-president of Parsons and Whittemore of New York, said.

LA TRIBUNE, Sherbrooke, 8/4/71

Délai d'un an accordé à Bell Canada pour éliminer la discrimination

TORONTO (PC) — La société Bell Canada a un an pour éliminer toute trace de discrimination dans la promotion de son personnel féminin.

Cet avertissement a été donné au cours de l'assemblée annuelle des actionnaires de la société, par Mme Laura Sabia, de St. Catharines, Ont., présidente du comité ad hoc sur le statut de la femme.

Faute de quoi, dit-elle, une campagne serait entreprise pour demander aux femmes de ne plus investir dans la société. Mme Sabia a fait remarquer qu'un bon nombre des 1,800 actionnaires présents à l'assemblée, étaient des femmes.

"Papa Bell en est toujours à son régime ru numerus clausus" dit-elle. Puis, se tournant vers M. Marcel Vincent, président de la société, elle lui dit que cette remarque était en rapport avec une déclaration faite par son vice-président, M. W.C. Macpherson.

Ce dernier, en effet, avait reconnu il y a près d'un an, qu'aux échelons supérieurs de la hiérarchie administrative, les salaires des hommes étaient quelque peu supérieurs à ceux des femmes. Il explique cette situation par le fait que les femmes ne songent le plus souvent pas à faire carrière. Comme groupe social, el-

les offrent à l'employeur moins de stabilité et moins de mobilité.

De la stabilité

C'est du barratin, tout ça, a répliqué Mme Sabia, en précisant que 30 pour cent des employés de Bell Canada qui ont plus de 20 ans d'ancienneté, sont des femmes.

M. Macpherson avait promis que cette situation serait corrigée dans un délai de cinq ans. "Qu'est-ce qui empêche, demanda alors Mme Sabia, la société de pratiquer, à partir de demain matin, la politique du salaire égal à travail égal?"

M. Vincent a répondu que la situation à la Bell n'était pas pire que dans les autres sociétés. Elle est, en fait, le fruit de conditions économiques et sociales qui remontent à plusieurs années.

Selon Mme Sabia, qui dit avoir mené une enquête, 53 pour cent du personnel de la Bell sont des femmes, dont moins de 1 pour cent ont pu accéder aux échelons supérieurs de la hiérarchie.

Elle a demandé qu'une femme soit nommée au poste de vice-président et que M. Macpherson soit licencié.

THE GAZETTE, Montreal, 13/4/71

Dollar value hurts overseas sales

By JOHN ROLFE

Nearly half of the companies surveyed by the Canadian Export Association say that the higher value of the Canadian dollar will reduce their overseas sales in 1971.

In a recent survey of 77 members of the association, 33 members said they expect a decline in sales this year. Another 14 said that they expect no increase from 1970.

The Canadian dollar currently is worth 99.25 cents in terms of U.S. funds, six cents more than it was worth this time last year.

TAKE CUT

This means that when Canadians buy imported goods, they pay six per cent less than they did a year ago. But it also means that when a foreign company pays a Canadian for something, it pays that much less.

The Canadian exporter must therefore take a six per cent cut in sales revenue from export shipments or else raise his price by that much. If he

raises the price, he may lose the sale to someone who is still charging the old price.

Not surprisingly, the high value of the dollar was the most frequently mentioned complaint in the CEA survey. However, the exporters did cite other problems, including:

—Declining demand for their products in offshore markets. This reflects the slower pace of economic growth in some European countries.

—Increased production costs here in Canada.

—Higher shipping charges.

—New or increased competition.

The 30 firms expecting an increase in sales in 1971 said that their profit margins on these sales will be either reduced or eliminated. They blamed this on the higher exchange rate.

A number of companies said that they went out of their way to maintain export volumes after the dollar was floated last year.

Some wanted to keep up

relations with key customers in the hope of an eventual restoration of profit margins. Others, faced with a cut in sales at home, needed export sales to keep their plants running.

Industries which were hardest hit by the exchange rate are: pulp and paper producers, electronic equipment and appliance makers, chemical producers, textiles, auto parts, aircraft and defence product makers. Lumber exporters have been especially hurt.

The exporters association is fearful that the side-effects of the floating dollar will throttle investment plans by many companies. The solution, it says, is for Ottawa to bring the exchange rate down to a more realistic level.

But while the exporters are complaining, importers are enthusiastic about the higher value of the dollar. They can buy their goods for six per cent less than they could a year ago.

(Financial Times)

THE FINANCIAL POST, Toronto, 10/4/71

Taken for granted too long

The time cannot be too far off when governments in Canada will have to overcome their visible indifference and listen carefully to the complaints of the pulp and paper industry.

The plain fact is that this important provider of jobs and foreign exchange is in substantial trouble. In virtually every company, earnings are down or losses are being recorded. Layoffs have reached alarming levels in the past six months. Wildcat strikes protesting the layoffs have begun to appear. Work weeks have been shortened. Some mills have been shut down for "inventory adjustments."

In common with many other business operations, the pulp and paper industry is having to cope with rising costs of labor, transport and fuel, and a generally depressed market. But the chief culprit is the high-flying C\$ which hits export-oriented industries like pulp and paper.

Equally important now, and perhaps over the long run even more fundamental, is the corporate tax structure within which the Canadian industry operates. Note, for instance, these facts:

1. During the past five years, the corporate income tax rate for five representative U.S. forest companies averaged 34%. By contrast, the average rate for five Canadian companies was 49%.

2. In Sweden, which is a potent competitor, pulp and paper companies have more liberal depreciation allowances, a lower overall rate of taxation, and value-added taxes instead of sales taxes. In addition, the Swedish companies are allowed to build up tax-free investment reserves. These tax provisions give Swedish companies substantial advantages over their Canadian competitors.

Given such facts, it is hardly surprising that, while the Canadian industry has been growing, the growth has not been as fast as that of its rivals in the U.S. and Scandinavia. In the past 15 years, Canada's share of the

U.S. newsprint market has dropped from 77% to 64%. Its share of free world newsprint production has declined from 54% to 41%. Canada's portion of free world production of dissolving and wood pulp is also off.

Meanwhile, world consumption of paper and paperboard continues to grow at about 5½% annually. The Canadian industry, in short, is not getting the financial return necessary to permit it to keep up with this expanding market. Last week alone, two companies — Canadian International Paper Co. and Great Lakes Paper Co. — announced the cancellation or deferment of kraft pulp mills together worth \$140 million.

In its preoccupation with growing foreign investment in Canada and with so-called high technology industry, Canadian governments appear to have forgotten that the domestic pulp and paper industry is also itching to expand and that, technologically speaking, it is already as up-to-date as any in the world. In particular, Ottawa has to accept special responsibilities for the industry's difficulties because the government has the final say in matters of credit and tax policy.

One of the chief difficulties facing some Canadian industries is that they have been crying wolf for so long now that Ottawa and the provinces may have grown deaf to their pleas. The pulp and paper producers, in the main, have not sought special protection. They have competed successfully in many parts of the world, in newsprint and pulp particularly.

The industry leads Canadian manufacturing in salaries and wages paid and in employment, and is second only to motor vehicle manufacturing in the selling value of its factory shipments.

That's why special heed should be paid to industry warnings that some temporary mill shutdowns may soon become permanent. The wolf may not be right at the door, but it has got close enough in a few cases to be cause for genuine concern.

LA PRESSE, Montréal, 13/4/71

Un fichier central... pour mieux surveiller l'entreprise

par Michel LORD

Lancé discrètement par le ministre des Institutions financières, compagnies et coopératives, M. William Tetley, le projet d'établir, à Québec, un fichier central des entreprises aura des répercussions plus importantes qu'on peut le croire, notamment avec la refonte de la Loi des renseignements sur les compagnies qui est déjà à l'étude.

C'est le sous-ministre des Institutions financières, compagnies et coopératives, M. Louis-Philippe Bouchard, qui préside le comité interministériel chargé de compléter le projet, au cours des deux prochaines années. Le comité comprend en outre des représentants des principaux ministères avec lesquels les entreprises doivent entrer en contact, soit l'Industrie et le Commerce, le Travail, les Revenus, la Justice, et même un représentant de l'Hydro-Québec.

Pourquoi l'Hydro-Québec, avons-nous demandé à M. Bouchard?

Il n'y a guère d'entreprises au Québec qui ne soient obligées de se manifester à l'Hydro-Québec en tant qu'utilisateur. L'Hydro-Québec peut donc devenir, une source importante de renseignements, dit-il.

Comme l'explique M. Bouchard, le premier objectif du gouvernement dans l'établissement d'un fichier central, c'est de simplifier les relations entre le gouvernement et l'entreprise dans la cueillette des renseignements.

À l'heure actuelle, les compagnies doivent faire rapport à un titre ou à un autre à plusieurs ministères. Au seul ministère du Travail, il est possible qu'une entreprise ait à produire trois rapports différents.

On espère réduire l'opération à un rapport unique, plus volumineux bien entendu et dont les données seraient transmises à partir du fichier central vers les ministères concernés.

D'un point de vue gouvernemental, cependant, le fichier central des entreprises prend une dimension plus large.

C'est le ministère des Institutions financières, compagnies et coopératives qui est le plus immédiatement concerné. À l'heure actuelle, il n'est guère en mesure d'exercer une surveillance étroite sur les activités des entreprises faisant affaires au Québec.

D'une part, les dispositions de la

Loi des renseignements sur les compagnies sont jugées insuffisantes. Les renseignements restent d'ordre général et la fréquence des rapports (une fois par an) n'est pas adéquate du moins en ce qui concerne certaines catégories d'entreprises. Ainsi, estime-t-on au ministère, les compagnies de finance devrait faire rapport chaque mois.

D'autre part, le ministère ne dispose pas des moyens techniques nécessaires à la mise à jour rapide des 120,000 dossiers accumulés. Environ le quart d'entre eux pourrait être détruit mais la procédure prévue dans la Loi des compagnies rendrait l'opération longue et coûteuse.

Disposant d'un fichier central des entreprises dont toutes les données seront traitées par un système d'ordinateurs, le ministère pourra répondre rapidement à toute demande de renseignements, qu'elle vienne d'organismes privés ou publics, comme la Commission des valeurs mobilières.

M. Bouchard entrevoit le jour où, grâce à cette mécanisation, son ministère sera en mesure de connaître au jour le jour l'évolution de la masse monétaire ou du niveau de l'épargne sur le territoire du Québec.

D'autres ministères tireront partie de l'existence d'un fichier central entièrement mécanisé.

Ainsi, le ministère du Revenu aura la tâche plus facile lorsqu'il s'agira de retracer une entreprise, voire un homme d'affaires, pour des questions d'impôt.

Quant au ministère de l'Industrie et du Commerce, les utilisations qu'il peut faire du fichier sont nombreuses. Par exemple, dans la préparation d'un dossier d'investissement, il sera possible d'obtenir très rapidement le tableau de l'industrie dans ce secteur, avec les compagnies qui y sont déjà en opération, leur répartition géographique, l'état de leurs bénéfices, etc.

Depuis deux ans déjà, le ministère des Institutions financières, compagnies et coopératives préparait la mise sur pied de ce nouvel instrument. Les possibilités, les objectifs ont été définis et acceptés.

Selon le sous-ministre responsable, le délai de deux ans fixé pour la réalisation du projet n'est pas aussi long qu'il ne paraît car en s'engageant dans cette voie le gouvernement du Québec fait figure de novateur. M. Bouchard affirme qu'aucune autre

province, ni même Ottawa, ne dispose d'un système central de renseignements sur les entreprises comme celui dont le Québec va se doter.

New York, 12/4/71 THE WALL STREET JOURNAL, Workers Vote Pay Cut At a Westvaco Mill

Upstate New York Facility Needs 10% Reduction, to Help Employee Group Take It Over June 1

MECHANICVILLE, N.Y. (AP) — Paperworkers have voted to take a 10% pay cut and accept reduced benefits as one step to keep a Westvaco Corp. mill open under new ownership after its scheduled closing June 1.

A group of middle-management employees of the plant, about 20 miles north of Albany, needed the labor agreement to enact a plan to take over the plant after the parent company ceases operations there.

Westvaco, formerly West Virginia Pulp & Paper Co., has plants in other parts of the country.

The group, called M-7, said the vote Friday by 550-member Local 678 of the United Pulp and Paperworkers assured three years of "labor peace" and would encourage potential investors in the new operation.

An M-7 spokesman said that a definite agreement with Westvaco for sale of the mill, an extension of deadlines on pollution control, and financial backing still are needed to keep the mill open.

Local 678's president, Leo Piroli, said the 214-85 vote represents a chance to provide the community of 6,000 with 300 jobs.

More than 700 persons were employed previously at the Westvaco plant, the community's largest employer. Operations have been trimmed gradually since early last year.

"As far as the contract goes," Mr. Piroli said, "It's setting us back 20 years. We had two strikes to gain what we have. We're tearing up that contract."

The union struck 16 weeks in 1956 and 18 weeks in 1959. The new contract would cut out pensions, and reduce Sunday pay and vacations, but it would retain the current hospitalization plan.

THE WALL STREET JOURNAL, New York, 13/4/71

St. Regis Profit Fell About Half in Quarter

Sales Ran Some 5% Behind Those
Of Year-Earlier Period, and in
March They Were Only 1% Off

NEW YORK — St. Regis Paper Co.'s first quarter profit fell to "the neighborhood of half" of the \$8.4 million, or 60 cents a share, earned in the 1970 first quarter, William E. Caldwell, executive vice president, operations, said in an interview.

Sales ran about 5% behind sales of \$223.4 million a year earlier, though in March, he said, "we had quite an improvement in sales," which were only about 1% behind those of March 1970.

Mr. Caldwell, who will become president of St. Regis later this month, declined to predict earnings for the year, but said one analyst's estimate of \$2.40 to \$2.50 a share is "not unattainable, but it's toward the high side. It depends greatly on general business conditions." In 1970, St. Regis had operating income of \$32 mil-

lion, or \$2.20 a share, before a special credit of \$3.7 million.

"I'm beginning to feel we're over the hump," Mr. Caldwell said, remarking that the strengthening of sales in March was spread across "nearly every one" of St. Regis' product lines, including corrugated containers, kraft paper and board, and coated printing paper. This month, for the first time in five months, the company isn't planning to take any downtime at any of the mills in its kraft division, he said.

Prices, however, remain weak in some lines, he said. While most of the company's corrugated shipping container plants are obtaining from spot customers at least part of the 4% price increase effective April 1, a 3.4% boost in prices of grocery bag and sack papers also slated for April 1 was postponed to May 1 because of widespread discounting. Obtaining the increase on May 1 "might be questionable," he said. "It'll take a heavy increase in demand."

St. Regis postponed indefinitely a 3% increase on prices of multiwall and small bags it announced last fall for April 1 when major competitors failed to follow suit, he said.

Though prices of plywood, and some lumber grades which leaped 22% to 25% in February, have eased in recent weeks, "so far there's

been no serious erosion," he said. If the U.S. maintains an annual rate of 1.7 million housing starts for 1971, the company's lumber and plywood operations will be "healthy," he said, and a further increase in housing starts would make the operations "very healthy."

St. Regis is facing cost increases of \$40 to \$50 million this year, he said. The company's bill for railroad freight alone will rise by \$5 million because of recent rate increases.

Labor contracts covering 85 of the company's 117 locations and about 70% of its 30,000 employees expire in 1971. "There is no one area where we are specifically anticipating trouble, but overall it's going to be a tough year," he said, citing the number of contracts and settlements at other paper mills that have produced wage increases of at least 7%.

Income from St. Regis' 50% interest in the mineral rights to 170,000 acres in the Florida Panhandle and southern Alabama won't be "spectacular, but it would be helpful," he said. The mineral rights' contribution to earnings can't be gauged more precisely until the site of the oil fields involved and the rate at which Humble Oil & Refining Co. intends to exploit them becomes clearer, he said. Humble bought the other 50% interest last week from Florida Oil & Gas Co.

THE VANCOUVER SUN, 30/3/71

Woodfibre residents given notice to move out of company town

By LORRAINE SHORE
Sun Staff Reporter

WOODFIBRE — Residents of houses and a bunkhouse owned by Rayonier Canada Ltd. have been given notice to move out of this company mill town on Howe Sound.

The notice was given in a letter from W. F. Francis, resident manager of the pulp mill, to residents of the 103 occupied homes owned by the company and about 100 single employees who live in the bunkhouse.

In the letter, Francis said that demolition or removal of the houses will be a three-phase operation, beginning with 30 on Sept. 1.

Thirty more will be cleared

out on Sept. 1, 1972, and a final 60 houses and the bunkhouse will be removed on Sept. 1, 1973.

The letter said that private developers and the central Mortgage and Housing Authority have both indicated an interest in helping the residents to relocate.

And, the letter said, houses which are in a suitable condition may be bought by residents for a nominal sum.

Francis said that in the case of all but three houses, the nominal sum is \$1, but this does not include the cost of moving the houses from the townsite by barge.

And he said there may be some difficulty moving the homes to Squamish, the nearest area, because of Squam-

ish's bylaw which sets a minimum value on houses.

Francis said the company announced its intention to clear the site of housing in 1961, and employees were encouraged to look for living accommodation elsewhere.

He said the mill now has about 500 employees, and only slightly more than 200 of them occupy company-owned accommodation.

The reason for the move, he said, was that Rayonier wanted to stop being a landlord as well as an employer. He pointed out that the houses are built very close to the mill on industrial property.

"It just seems like a more natural life for people to live elsewhere," he said.

He said the small communi-

ty, where everyone worked in the same place, seemed to become narrow, and that the company felt it would be more suitable for employees to live in other places.

Francis said the company housing originated when the only transportation into the town was by Union Steamships ferry, but not there is a highway to Squamish and the Woodfibre ferry makes 11 or 12 return trips a day.

Bruce Yorke, president of the B.C. Tenants Council, said Monday that his group would fight the move.

"It's an eviction order against a whole town," he said.

Yorke said all residents of the town are members of the tenants council, and most of them consider the housing a condition of employment.

He said there has already been a meeting in Woodfibre and a local council has been elected to lead the fight.

He said the residents will attend a meeting of the Squamish town council this evening to protest the move.

THE MONTREAL STAR, 12/4/71

THE WALL STREET JOURNAL,
New York, 13/4/71

Forests more profitable

MacMillan Bloedel, the largest Canadian forest products producer, is optimistic that profits in the industry may improve this year.

"In the longer term, world demand for forest industry products continues to grow and the possibilities of very significant growth for the industry remain undiminished," the company's annual report says.

"The full potential of the industry will not be achieved, however, until the errant swings in the North American economy are removed or reduced by the elimination of the distortions and dislocations which result from present wage settlement practices."

Capital spending in 1970 was \$46,728,482 compared with \$105,092,056 in 1969. The company is spending an additional \$30 million on pollution controls over a five-year period.

MacMillan has obtained a 20-per-cent equity interest in two property developments in Sydney, Australia, and has agreed to establish a Malaysian company in conjunction with the state government of Pahang for a small hardwood

logging operation. A sawmill and plywood plant may be set up in Pahang later.

Donohue

Donohue says the timing of the anticipated upturn in the economy, the strength of the Canadian dollar and other complex factors make it difficult to predict the company's performance in 1971.

Donohue reported Dec. 31 year earnings of \$1,378,365 or 56 cents after a charge of \$506,276 representing minority interest in earnings of subsidiaries Charlevoix Paper and

Malbaie Paper. Revenue was \$5,113,341.

Year earlier figures aren't comparable because results of the two subsidiaries have been consolidated with those of the parent company only in the latest period.

It is expected that the 1971 consumption of newsprint in the U.S. will be about the same as in 1970 and that the operating rate for the Canadian industry will decrease because of new plant capacity in North America, Donohue said.

"The beneficial effect of proposed increases in the selling price of newsprint will be offset by increasing costs of raw material, wages and delivery charges."

THE MONTREAL STAR, 8/4/71

China buys B.C. pulp

Canadian Forest Products, Vancouver, sold 12,000 tons of sulphate pulp to China in a one-delivery order estimated by industry experts to be worth between \$1.8 million and \$2 million.

As far as the company knows it is the first shipment of wood pulp to China from Canada. The product is to be both bleached and unbleached.

The pulp was sold to a Chinese state trading agency directly, with the help of the Canadian trade commissioner in Peking.

STANDARD-FREE HOLDER, Cornwall, 7/4/71

Charges Ont. Parks Used For Timber Instead Of Recreation

FORT FRANCES Ont. (CP) — Gavin Henderson executive director of the National and Provincial Parks Association said Ontario's parks are being managed for timber production and not recreation.

In a brief to the Quetico advisory committee he said the only way for the lands and forests department to look after its parks correctly is to take them out of the department's timber branch and place them under parks-branch control.

He said commercial logging

in the 1750-square-mile park about 100 miles west of Thunder Bay should be banned immediately and the park should be classified as primitive.

"It would restore to this province a part of our great national heritage free from commercial exploitation where values are purely emotional and esthetic."

But Bruno Seppala woods production manager for Ontario-Minnesota Pulp and Paper Co. Ltd. here said it would deny the majority of Canadians access to the park to look it up in a primitive wilderness classification.

13/4/71

AZETTE, Montréal,
Inter. Paper

Earnings of International Paper Co. in the first quarter dropped to about half of the \$25,700,000 or 58 cents a share earned in the same period last year. It is indicated in a report issued by the New York-based forest products firm.

Earnings were "slightly better" than the 28 cents a share of the fourth quarter of 1970, the company said.

E CALGARY HERALD, 3/4/71

Forestry department feels fund pinch

by Arthur Blakely
Ottawa News Services

OTTAWA — By sheer inattention, the federal government almost starved its fisheries and forestry department out of existence.

It came about—almost—this way.

The federal cabinet decided in its wisdom last year to re-organize the fisheries and forestry department with a huge new super-department, the department of environment.

It further decided to achieve this objective by inserting a large environment section in the government's Bill C-207, the controversial omnibus bill covering the reorganization of the Government of Canada "and matters related thereto."

With the confident expectation that this bill would have been passed by Parliament by the end of the 1970-71 fiscal year, the end of March, the government provided no spending budget for the vanishing department of fisheries and forestry for the fiscal year 1972.

Spending estimates for the fiscal year contained

abundant provision, however, for the huge new department of environment.

Unfortunately, the passage of Bill C-207 has not gone according to the government's planning.

Because it is a long, rambling bill containing many unrelated provisions, it has bogged down in the Commons.

It is still at the committee stage, with many of its sections still to be approved.

Around the middle of last month the government, turning momentarily from its other preoccupations, discovered to its horror that instead of replacing the fisheries and forestry department with an environment department on April 1, it was in a fair way to wind up without either.

Then, because the crisis was obviously real, the government entered into delicate behind-the-scenes negotiations with the opposition parties, to find the least objectionable method of keeping fisheries and forestry in operation, pending the final passage of the government reorganization bill.

THE MONTREAL STAR, 13/4/71

Fresh boost in newsprint?

Bowater Paper Corp. expects additional price increases to follow the April 1 newsprint price boost in North America, and anticipates a two-tier price structure with the Canadian price in the U.S. differing from the U.S. price.

Resumption of growth of the U.S. economy, expected in the third and fourth quarters, will lead to higher newsprint consumption and a strengthening of the U.S. dollar.

Bowater, which already makes wallboard doors and built-in furniture and is in the electrical wholesaling and lumber marketing business,

is diversifying further into building-materials.

Company expects lower first-half earnings because of the cost-price squeeze in the industry, but sees "distinct improvement" in the second-half, particularly in the U.K. There will be no change in dividend.

Capital spending this year will total about \$24 million against \$53.1 million last year. About half will be spent overseas to complete projects already started and for improvements at existing mills.

Newsprint sales in the U.S. showed little growth in the first-quarter because U.S. newspapers aren't doing particularly well. Last year 55 p.c. of Bowaters's sales came from the U.S.

E VANCOUVER SUN, 3/4/71

poll controls due Woodfibre plant

in Victoria Bureau

VICTORIA — Resources Minister Ray Williston said that work will begin near to cut down the bad pollution in Woodfibre.

Williston said in an interview that it was intended to build a pollution control facility to reduce discharges from the Canada pulp and mill into the water and is desirable to improve discharges at the same

Williston said the Pollution

Control Board is collecting data on air emissions from existing mills, although since Jan. 1 all new pulp mills have had to apply for permits from the board for air discharges.

Williston said that no special arrangements have been made for financing the Woodfibre pollution control installations and that the company will put the facilities in itself.

There is no time limit for the installations, he said.

The cost, he said, will be "in the millions."

THE VANCOUVER SUN, 8/4/71

Union fights female jobs

MONTREAL (CP) — Glass and ceramic workers at Dominion Glass Ltd. are trying to prevent the company from hiring women for night shifts on grounds that the jobs should go to men.

Negotiations between the company and the United Glass and Ceramic Workers have broken off, the union said Tuesday, and one of the reasons is the company's insistence on hiring women for night work.

Jean Gariepy, union representative, said the hiring of additional women workers is unacceptable.

"We will continue to protect our women employees," he said. "However, with the very high unemployment rate in the Montreal region, we can't accept the company hiring female personnel when there is at its disposal a strong supply of male personnel."

THE MONTREAL STAR, 13/4/71

Builders seek tax relief

Canadian Press

HALIFAX — The Canadian Construction Association is "very hopeful" that the federal government's 1971-72 budget will take steps to relieve the construction industry from taxes on building materials, association president Robert Stewart said here today.

Mr. Stewart commended the Nova Scotia and New Brunswick governments for granting relief from provincial sales taxes on building materials. Ottawa and the other provinces should follow their examples.

In a bill passed by the Nova Scotia legislature last December, the new Liberal government removed the seven-per-cent provincial sales tax on building materials used in constructing new homes. The New Brunswick Progressive Conservative government, elected last October, removed the province's eight-per-cent sales tax from all building materials.

Mr. Stewart said sales taxes on the materials and equipment used by the industry were "a tax on capital investment," increasing the cost of investment and making it "more difficult".

The construction industry was the only one to have its equipment taxes at the federal level, while "better equipment is our main medium for increasing productivity and curtailing cost increases."

If Ottawa could not exempt building materials and equipment generally, then it could extent the current rebate system applied to schools, factories and houses.

THE VANCOUVER SUN, 2/4/71

Honest facing up in forests urged

PRINCE GEORGE (CP)—Deputy Forest Minister J. S. Stokes told a lumbermen's convention Thursday that industry must honestly face up to mounting public concern over the natural environment.

"Personally, I think this changing attitude to resource use is here to stay and that all of us associated with the more traditional use of forest land have to learn to live with and adjust to revised planning of resource use," he said.

Speaking to the annual convention of the Northern Interior Lumbermen's Association, he gave the forest industry a pat on the back for the \$85 million committed to pollution control for the first half of the 1970s.

He said the main problem is a present lack of knowledge and research into pollution control in the industry.

While both government and industry have made 'good progress' in land use technology there is still much to be done to meet the challenges of the 1970s.

"In forest utilization, we look to industry for support of the forest service close utilization program and of efforts to achieve proper pollution control by the industry," he said.

The government has introduced the ecological reserves act and the environmental and land use act, he said. By the mid-1970s the government will have created more than 100 ecological reserves to provide areas for scientific research and education associated with the environment.

These forest preserves will also serve as examples of

"natural ecosystems" and to preserve rare or endangered plants and animals in their native habitat, he said.

THE WALL STREET JOURNAL,
New York, 6/4/71

Hammermill's Earnings Fell Sharply in Quarter

Operating Profit Declined 66.9%
In First 12 Weeks, Net Income
After Special Gain Fell 39.2%

By a WALL STREET JOURNAL Staff Reporter

ERIE, Pa. — Hammermill Paper Co. reported a 66.9% drop in earnings from operations in the first 12 weeks of 1971. The company blamed the drop on "a continuation of declining industry demand, reduced operating levels and low product prices."

For the 12 weeks, earnings before a special gain were \$918,000, or 15 cents a share, down from \$2.7 million, or 46 cents a share, in the first 12 weeks of 1970. Sales declined 4% to \$82.6 million from \$86.1 million.

A special gain of \$787,000 brought net income for the 1971 quarter to \$1.7 million, or 27 cents a share, down 39.2% from 1970. The gain results from a \$1.1 million special credit from the sale of securities less a \$300,000 special charge related to anticipated costs in the construction of a new pulp mill at the company's main plant here. There were no special charges or credits in the 1970 quarter.

John H. DeVitt, chairman and chief executive officer, said that demand for many of the company's paper and other products has improved in recent weeks and there are indications that the national economy and product prices have started to improve.

The 1970 figures were restated to reflect a change in the reporting periods of certain operations.

THE VANCOUVER SUN, 8/4/71

ANZA FOR MILLWRIGHTS

\$250,000 for doing nothing

HALIFAX (CP) — The Michelin Tire Corp. has agreed to pay millwrights a total of \$250,000 for not performing certain work in the construction of two tire manufacturing plants in Nova Scotia.

A company statement said today the \$250,000 covers payment for the estimated man hours which the millwrights would have worked in the assembly of tire-making machinery in the Michelin plants at Granton and Bridgewater.

The company said the agreement clears the way for Michelin's own employees to do the work and eliminates the possibility of strikes by unions claiming jurisdiction for the work.

The statement said that had the agreement not been signed the opening dates for the two plants, being built at a cost of \$100 million, would have been "pushed back many months."

The union involved is Local 1178 of the United Brotherhood of Carpenters and Joiners.

Allan Rogers, business agent for the local, said today the agreement covers about three months and provides for the millwrights to be paid at

an hourly rate of \$5.40. It also provides that any overtime work done by the Michelin workers will be covered, with the millwrights receiving overtime pay.

Rogers said about 60 of the local's 102 men would be involved. Asked how the 60 were chosen, he said, "I'd rather not comment."

The work apparently involves secret equipment which Michelin guards closely.

"The company faced loss of several million dollars due to the direct and indirect repercussions of threatened strike action, yet found itself boxed in by technical considerations that required company-trained . . . workers for complex machine assembly," the Michelin statement said.

"The company insisted on using its own workers who are familiar with the specialized mechanical and processing equipment developed exclusively by Michelin," it added.

The same Michelin employees have erected similar machinery in 26 other company plants in 11 countries.

"None of the construction millwrights are expected to be required to report to either of the two Michelin job sites

while receiving payments handled by union officials," Michelin said.

"The company . . . feels it had no other option in view of a strike threat at this critical stage."

The Bridgewater plant is to go into production this spring while the Granton plant is due to open in the fall.

Michelin is building its Nova Scotia plants with financial assistance from Industrial Estates Ltd., the provincial industry-promoting agency.

The two plants are expected to employ about 1,860 people when in full production.

THE GAZETTE, Montreal, 7/4/71

B.C. Forest

British Columbia Forest Products Ltd. said it will close its Youbou sawmill on Vancouver Island Friday for two weeks, resulting in the layoff of 370 men. Previously the company had closed down a third work turn at the sawmill, idling 70 men.

The company said the latest action resulted from a generally poor export market for lumber the unusually long winter which had reduced the supply of logs and a shortage of rail cars.

Veneer and power plant operations involving 95 workers at Youbou will continue to operate.

Federal mortgage bank plan could help housing industry

By JIM ROBINSON
Star staff writer

OTTAWA — Plans for a proposed multi-million dollar federal mortgage bank are being quietly circulated among top Canadian bankers, investment dealers, trust company men and insurance men, The Star has learned.

The proposed "bank" would encourage housing construction by buying and selling mortgages, thus giving mortgage investors a place to quickly alter their investments.

The proposal—and a confidential questionnaire inviting reaction—have been sent to select financial leaders by the federal task force on the residential mortgage market.

This is a study group set up with little fanfare last August by Robert Andras, minister in charge of housing. Its goal is to find ways of directing more private investment money into housing.

EASILY CASHABLE

Large Canadian financial institutions have said they might invest more in mortgages if they knew they could cash them in quickly when financial conditions change.

A federal mortgage bank could operate as a buyer of last resort, so that mortgage holders would know they could always sell their mortgages to the mortgage bank if nobody else would buy them.

Last year mortgage loans by private lenders and the federal Central Mortgage and Housing Corp. totalled some \$3.25 billion. The aim of the task force—officially called a "Project Team on New Financing Mechanisms and Institutions"—is to expand that investment in housing and make it cheaper and easier.

Task force research director Prof. Jamie Poapst, of the University of Toronto school of business, says he can't disclose contents of the mortgage bank questionnaire until his work is done, "hopefully by summer."

COUNTRY-WIDE

His "confidential survey" is going to investment men across the country, not just those in Toronto and Montreal head offices, he said in an interview.

"We don't want to be accused of being Eastern money men—or Central money men."

But though he wouldn't discuss his opinion survey, Poapst revealed much of the detail of the kind of mortgage agency he'd like to see. It would have two main functions.

- It would buy and sell mortgages.

- It would lend money against the collateral of a mortgage or other instrument of housing finance, such as a bond issued by some form of housing or mortgage investment company.

The idea is that prices of mortgages bought and sold would be set on a bid-and-ask basis, much as they are on a stock exchange. Two prices would be quoted for a

given type of mortgage—the "bid" price, which is the highest price the bank would be willing to pay, and the "ask" price, which is the lowest price at which the bank would sell such a mortgage.

NO SURPRISES

There's no conclusion yet on whether the mortgage bank should be owned by government or by private interests. Canada's stock exchanges are privately owned.

"We have chosen to involve the private sector in our deliberations because we do not want to spring surprises on them," Poapst said. "Especially when we're counting on them to respond to the changes we're concerned with. And they have useful advice to offer."

The mortgage bank might be potentially profitable, he said, because it would sell mortgages at slightly more than it pays for them.

It might further increase its profit by buying mortgages when general interest rates are high, and selling later when rates are lower.

A buyer would pay more for a mortgage when general interest rates are lower because the mortgage would still carry its original interest rate, which would then be higher than rates for new mortgages.

Buying mortgages when general interest rates are high could also help ease fluctuations in the mortgage market, Poapst said.

LONG-TERM

When general interest rates on bonds and other securities are high, investors are anxious to get their money into a long-term investment that will pay them the high interest rate for many years.

They became less interested in mortgages, which under law, can be re-financed by the borrower at the end of five years. This makes it difficult for would-

be home-owners to borrow money for buying or building a house.

Poapst said the mortgage bank might step in as a mortgage buyer, providing funds for houses at such times. Later, when most interest rates are lower and there's more demand for higher-paying mortgages, the mortgage bank could sell what it bought during the tight period.

Admittedly, this might run counter to the Bank of Canada's attempts to regulate the economy by restricting investment funds, Poapst said.

The Bank of Canada is the federally-owned central bank which issues money and, among other things, can restrict the supply of money in the country when the government feels it necessary.

This is a classic method of dealing with inflation. When Ottawa decides that prices and wages are spiralling upward, out of control, it can use the Bank of Canada's powers to restrict money available for investment.

BUSINESS SLOWED

With less investment money available, businesses can't expand as fast and are more reluctant to grant wage increases. Consumers have less money to spend on goods, so prices of goods don't rise as fast.

That's the commonly-held theory of inflation-fighting which was used by Ottawa in 1969 and early last year.

Poapst said a mortgage bank might tend to lessen Ottawa's anti-inflation efforts because the mortgage bank would be making more mortgage money available while the government was trying to restrict it.

On the other hand, he said, it might be to Ottawa's advantage to have the mortgage bank ease the effects of a general tight-money, anti-inflation policy in the sensitive area of homebuilding.

This would allow Ottawa

to tighten its economic screws without causing serious housing problems, he suggested. "Tight money periods seem to hit the mortgage market hard," and a mortgage bank might change that.

Poapst said a new mortgage bank wouldn't necessarily service its mortgages. Servicing a mortgage means looking after the details of collecting payments, including interest.

He said the duties of servicing might rest with the person or institution who sold the mortgage to the mortgage bank. Servicing duties would then pass on to whoever bought from the mortgage bank.

Or the mortgage bank might make sale of the servicing function optional.

ADDED ADVANTAGE

The bank might deal in both conventional residential mortgages and in mortgages issued under the National Housing Act, insured by Central Mortgage and Housing Corp.

An added advantage of a mortgage bank, said Poapst, is that it could overcome the opposition to mortgage investment of certain institutional investment managers who aren't happy unless they are able to alter their approach to investing at will.

He said some pension men won't buy mortgages now simply because they were raised on a philosophy of constantly churning over their investment portfolio. They find mortgage investment too static.

A mortgage bank still wouldn't let them change mortgage investments as often as they buy and sell shares on a stock market, said Poapst.

But it would allow much more shuffling of mortgage portfolios than is possible today.

NEXT: More task force ideas for cheaper mortgages.

BINDING SECT.

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